# QUEEN'S

# University and College

INCORPORATED BY ROYAL CHARTER,

AND

# ROYAL COLLEGE OF PHYSICIANS & SURGEONS

AFFILIATED TO IT,

KINGSTON, CANADA.



# CALEXDAR,

SESSION 1878-79.

#### KINGSTON:

PRINTED FOR THE UNIVERSITY AT THE BRITISH WHIG OFFICE, BROCK ST. 1878.



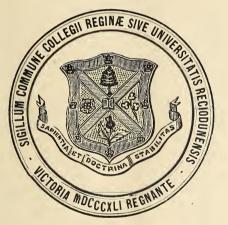
# CALENDAR

OF

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# UNIVERSITY OFFICERS.

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WILLIAM IRELAND, Esq., Kingston, Secretary-Treasurer.

The Annual Meeting of the Board is held in the Senate chamber on the evening of the last Wednesday of April.

# CHANCELLOR: Rev. JOHN COOK, D.D., Quebec.

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VICE-PRINCIPAL.
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Professor of Oriental Languages, Biblical Criticism, and Church History.

THE VICE-PRINCIPAL,

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REV. JOHN H. MACKERRAS, M.A.,

Professor of Classical Literature.

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REV. GEORGE D. FERGUSON, B.A.,

Professor of History and English Literature, and Lecturer on Modern Languages.

JOHN WATSON, M.A.,

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ALEXANDER MELLVILLE BELL, F.E,I.S., Brantford, Watkins' Lecturer on Elocution.

#### PROFESSOR MOWAT-Registrar.

Examiner for Matriculation in Medicine-SAMUEL WOODS, M.A., Kingston.

#### CONVOCATION.

Members.—Trustees, Professors, Lecturers, Fellows, Graduates, and Students being undergraduates. Secretary—Prof. Mowat.

#### OBSERVATORY.

BOARD.—The Principal, Professor Williamson, M. Flanagan, Esq. Director—Prof. Williamson. Observer—Prof. Dupuis, Secretary—Prof. Mowat.

#### LIBRARY.

CURATORS.—The Principal, Profs. Mowat and Ferguson. Secretary—Prof. Mowat. Librarian—Prof. Dupuis.

Curator of the Museum-Professor Dupuis.

Janitor-John Cormack.

#### UNIVERSITY COUNCIL.

The Council consists of the Chancellor, the Trustees, the members of the Senate, and thirty-three elective members.

The Chancellor is elected by the Council, except when two or more candidates are nominated, in which case the election is by registered graduates and alumni. He holds office for three years and, as highest officer of the University, presides at meetings of Council and Convocation and at Statutory meetings of Senate. In his absence he is represented by the Vice-Chancellor.

Of the elective members seven retire annually, except in every fifth year, when only five retire. Successors are elected by registered graduates and alumni. Retiring members may be re-elected.

The Council has power to discuss all questions relating to the College and its welfare, to make representations of its views to the Senate or the Board of Trustees, to decide on proposals for affiliation, and to arrange all matters pertaining to the installation of Chancellor, its own meetings and business, the meetings and proceedings of Convocation, and the fees for membership, registration and voting.

#### ELECTIVE MEMBERS.

#### (In the order of their retiring.)

1883	JOHN MCINTYRE, M.A
1882	Thomas F. McLean, M.D
1881	JOHN A. MUDIE, B.A
1880	MICHAEL SULLIVAN, M.D., Kingston. WILLIAM H. FULLER, M.A. Kingston. REV. MALCOLM MACGILLIVRAY, M.A. Woburn. REV. DONALD ROSS. Lancaster. ROBERT V. ROGERS, B.A. Kingston. WILLIAM CALDWELL, B.A. Lanark. REV. JAMES GORDON, M.A. Clifton.
15th Mar 1879	HERBERT S. McDonald, M. A. Brockville. REV. CHARLES I. CAMERON, M.A. New Edinburgh. REV. JOHN K. McMorine, M.A. Prince Arthur's Landing. ALEXANDER G. McBean, B.A. Montreal. REV. JAMES C. SMITH, M. A. Guelph. REV. ROBERT CAMPBELL, M.A. Renfrew.

# BENEFACTIONS.

#### Endowments and Bequests.

St. Andrew's Church Ladies Association, Toronto—Scholarship	-	
Ladies of Kingston—Scholarship	239	
His Royal Highness THE PRINCE OF WALES—Prize	800	OÓ
The late John Mowat, Esq., Kingston—Scholarship	80 <b>0</b>	00
Rev. Alexander Lewis, Mono—Prize	400	00
The late George Michie, Esq., Toronto	2,000	οό
The late Edw. H. Hardy, Kingston	400	oò
MRS. GLASS, Sarnia, for HENRY GLASS Memorial Scholarship	500	οò
A gentleman in New Brunswick-Dominion Scholarship	1,300	oò
Friends of the late Principal Leitch—Memorial Scholarships	2,433	
The late REV. ALEXANDER BUCHAN, Stirling—Scholarships	3,000	
The late Mrs. MARGARET W. McIntyre, Perth—Scholarship	400	
The late John Watkins, Esq., Kingston—Elocution Lectureship	4,000	
" " Scholarship	1,300	
DAVID STRATHERN Dow, Toronto—Scholarship	1,500	
DAVID STRATHERN DOW, TOTORIO—Scholarship	1,500	00
Annual and other Contathations 1000 00		
Annual and other Contributions, 1877-78.		
In addition to contributions to the Bursary Fund.		
Students' Association, St. Andrew's, Scotland—Scholarship	& 48	22
A Friend, Kingston—Cataraqui Scholarship		
St. Paul's Church, Montreal—Scholarship		00
St. Faut S Church, Wontreal—Scholarship		00
General Assembly, Church of Scotland	2,427	
Congregation of McNab and Horton—Scholarship		00
Session of St. Andrew's Church, Toronto —Scholarships	110	
The College Senate—Scholarship		00
Hon. D. L. Macpherson, Toronto, — for Class Prizes	25	00
ALEX. G. McBean, Esq., B.A., Montreal, "	25	00
WILLIAM TASSIE, Esq., LL.D., Galt, "	25	00
ALEX. G. McBean, Esq., B.A., Montreal, WILLIAM TASSIE, Esq., LL.D., Galt, Session of St. Andrew's Church, Almonte,	20	00
Don. B. MacLennan, Esq., M.A., Q.C., Cornwall, "	25	00
Elocution Association—Prizes	40	00
ROBERT J. REEKIE, Esq., Montreal — Scholarship		00
EDWARD G. MALLOCH, Esq., B.A., Perth, University Prize		00
Bursary Fund.		
Kingston, St. Andrew's Church (for two years)	\$ 150	00
Portsmouth	_	00
Martintown		00
Scarboro and Markham	25	
Guelph (per Rev. J. C. Smith)	30	
Perth	10	
L'Orignal and Hawkesbury		00
Pakenham		
Smith's Falls		00
Hamilton (St. Paul's Church)	12 20	
Ottawa	50	
East Nottawasaga	10	
St. Gabriel's Church, Montreal	25	00

#### ENDOWMENT FUND.

In connection with the endowment scheme, begun in Januuary, 1869, paid subscriptions secure privileges according to the following regulations:—

- I. A donor of \$500 founds a Scholarship bearing his own name or any other which he may give it, and acquires the privilege of naming *annually* one student to attend College for one session free of class fees. On the founder's death his lineal representatives become entitled to the privilege of free attendance in the order of seniority.
- 2. Donors of \$100, \$200, \$300, and \$400, may nominate, at any time during life, one, two, three, or four students respectively, to a course in Arts free of class fees.

#### Unused Nominations.

Kingston—W. Ireland, 3; G. M. Kinghorn, 3; F. Fowler, M.D., F. J. George, O. S. Strange, M.D., 2; G. Davidson, Prof. Dupuis, M.A., Hon. J. Patton, A. Livingston, J. Creighton, J. O'N. Ireland, L. Clements, J. Neish, M.D., W. Irving, Jr., J. McKelvey, J. McMillan, R. White, J. Henderson, G. M. Macdonnell, B.A., J. A. Allen, R. V. Rogers, B.A., W. Robinson, M.P.P., J. Minnes, Alex. F. Macpherson.

OTTAWA—W. Clegg, J. Gordon.

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Guelph—D. Allan, ; Mrs. Wm. Allen, Sen., J. Massie, C. Davidson.

Hamilton-M. Leggatt, Mrs. G. H. Gillespie, A. Turner.

Lachine—J. P. Dawes, T. A. Dawes, C. Esplin.

Scarborough—J. Ferguson, T. Davidson, R. Davidson, J. Laurie.

CLIFTON—Rev. J. Y. Cameron, M.A.

CARLETON PLACE—J. Gillies, R. Bell.

Perth-J. Wilson, T. Mansfield, Rev. W. Bain, D.D., Rev. T. Hart, M.A.

VAUGHAN-J. Grahame, T. Grahame.

W. GWILLIMBURY—W. J. Sturgeon.

Lanark—A. Caldwell, J. McIlquham.

E. WILLIAMS—Rev. R. Chambers, B.A., A Elliott.

INDIA—T. F. Harkness, B.A., Principal Jardine, B.D.

GALT-Rev. J. B. Muir, M.A., H. McCulloch, W. Osborne.

MIDDLEVILLE—Rev. D. J. McLean, B.A., W. Croft, A. Campbell.

NOTTAWASAGA—Rev. A. McDonald. B.A.

E. Nottawasaga-Rev. D. McDonald, M.A.

W. King—Rev. J. Carmichael, D. McMurchy.

MARKHAM-G. Miller, Rev. J. S. Eakin, B.A.

ALMONTE-J. D. Gemmell, 2; J. H. Wylie, Rev. J. Gordon, B.A.

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UXBRIDGE—Rev. A. McLennan, B.A.

SMITH'S FALLS-Rev. S. Mylne, 2; R. Hunter.

GEORGETOWN, Que.—Rev. J. Muir, D.D.

LONDON-Rev. D. Cameron, J. Wright.

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GLANFORD—A. Bethune, M.D.

BUCKINGHAM—I. McLaren.

Belleville -D. Pitceathly.

WHITBY-M. Thwaite.

RENFREW-J. L. McDougall.

Coulonge—Hon. G. Bryson.

CHELSEA-J. Mather.

BECKWITH-Rev. W. Ross. M.A.

WATERDOWN-A. Brown.

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## FOUNDERS OF SCHOLARSHIPS.

Andrew Allan 2 Montreal.
Bell (John)*Toronto.
Bronson (H. F.)†Ottawa.
Bronson (E. H.)†Ottawa.
Buntin (Alex.) 2 † Montreal.
Cameron (John A.) Summerstown.
Campbell (Hon. A.) †.Kingston.
Carruthers (John) 2 Kingston.
Cluness (W. R.) 2 † Sacramento.
Crawford (Alex.) Montreal.
Currier (J. M.) Ottawa.
David Law †Montreal.
Dennistoun (Judge) 2.Peterboro.
Dennistoun (James)Peterboro.
Doran (Michael) 2 Kingston.
Fleming (Sanford) † . Ottawa.
Fulton (Alex. T.) † Toronto.
Gillies (John)Carleton Place
Gillies (John)Carleton Place Gilmour (Allan) 2 † Ottawa.
Gordon (Rev. D. M.) Ottawa.
Grant (J. A.)Ottawa.
Greenshields (D. J.) Montreal.
Hardy (Edw. H.)*Kingston.
Hugh (Sir) Allan 3 Montreal.
Johnston (Jas.) †Montreal.
Kinloch (William) † Montreal.

Mackerras (Prof.)Kingston.
Maclennan (lames)Toronto.
Macpherson (Hon. D. L.). Toronto.
Macpherson (Allan) *Kingston.
Malloch (Mrs. Edw.)Ottawa.
McGillivray (N. J.) Montreal.
McNee (lames)
Michie (James) 2Toronto.
Morrison (John) † Montreal.
Mowat (Prof.) † Kingston,
Muir (Robert) † Montreal.
Murray (Prof.) Montreal.
Paton (John)New York.
Perth (A Friend) † Perth.
Rankin (John) 2 † Montreal.
Reekie (R. J.)Montreal. Shedden (John) *Toronto.
Shedden (John) *Toronto.
Smith (John) * Montreal
Snodgrass (Principal) 2Kingston.
Stephen (George) 2 Montreal.
Stewart (Mrs. W.) Ottawa.
Thos. McKay 2 + ± Ottawa.
Urquhart (Alex.) Montreal.
Williamson (Prof.)Kingston.
William Dow 2 + Montreal.
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#### Donations to the Library.

From Convocation, 1877, to Convocation, 1878.

Albert University Calendar, Belleville, 1876-7.

° 1877-8.

Church of Scotland Missionary Record. April, 1877.

Journal of Education. March, 1877. April, 1877.

University of Halifax—Regulations for Matriculation and Degrees. Halifax, 1877

Calendar, 1878.

Peter Mackenzie-Glasgow Characters.

Catalogue of Theological Seminary. Columbia, S.C., 1877.

W. Cochrane, D.D., Brantford—Minutes of the Synod of Hamilton and London. Brantford, 1877.

From the Queen's Printer, Toronto—Investigations of the Unsettled Boundaries of Canada, by C. Lindsey. Toronto, 1873.

From the Queen's Printer, Toronto—Report on the Boundaries of the Province of Ontario, by D. Mills. Toronto, 1873.

Government of Ontario-Statutes of Ontario, 1877.

Rev. W. Robertson, Chesterfield, Ont.—Friendship with Christ. A Sermon, by by the donor. Toronto. 1877.

Government — Province of Manitoba and North-West Territory of Canada.

Ottawa, 1876.

- " Manitoba and the North-West of the Dominion, by Spense. Quebec, 1876.
- " The Saskatchewan Country, by Spense. Montreal, 1877.
- "Reports of Meteorological and Magnetical Observations, Canada, 1876. Ottawa, 1877.

Harris-Report on Matters relating to Science, by the donor. London, 1877.

Rev. J. Burton, Belleville—The Canadian Watchman, 26 numbers, August 31, 1830, to February 18, 1831. Kingston, Ont.

J. Young and R. A. Smith, Edinburgh—Graham's Chemical and Physical Researches, edited by the donors. Edinburgh, 1876.

Elfter Bericht Naturforscheuden Gesselschoft in Bamberg. Bamberg, 1876.

Aberdeen University Calendar, 1877-8.

McGill College Calendar, 1877-8.

St. Andrew's University Calendar, 1877-8.

Alma Mater Society of Queen's College—Queen's College Journal, 1876.

W. L. Lindsay, Perth, Scot.—The spirit of Melancholy, by an invalid. Perth, 1876.

" Syllabus of Lectures on "Substitutes for Paper Material," by the donor, Perth, 1859.

" The Lichen Flora of Greenland, by the donor.

" The Auriferous Quartzites of Scotland, by the donor. 1875.

Andren Beretning om Ladegaardsens Hovedgaard. Christ, 1875.

- G. O. Sars—On some remarkable forms of Animal Life from the great depths off the Norwegian Coast, by the donor. Christ, 1875.
- Yale College Catalogue of Students, 1877-8.
- Rev. George Bell, D.D., Walkerton—Testimony of the Rocks, by Hugh Miller. Edinburgh, 1876.
- Principal Grant-From Ocean to Ocean, by the donor. Toronto, 1877.
- Harris, J., Montreal—Supplementary Note to "the circle and straight line," by the donor. Montreal, 1877.
- University of Toronto-Examination Papers, 1877.
- S. Woods, Esq., Kingston—Autobiography of Thomas Guthrie, D.D., by his sons. Toronto, 1877.
  - Evenings in the Library, by G. Stewart. Toronto, 1878.
- James Croil, Montreal—Proceedings of first General Presbyterian Council. Edinburgh, 1877.
- W. Robinson, M.P.P., Kingston—Revised Statutes of Ontario. 2 vols. Toronto, 1877.
- House of Commons—Sessional Papers. Vol. X., Nos. 1-9. 9 vols. Ottawa.
  - Statutes of Canada. Vols. I and II. Ottawa, 1877.
  - Journals. Vol. XI. 1877.
    - Appendix to Journal. Vol. XI. 1877.
- Senate of Canada—Journal. Vol. XI. 1877.
- Boston University Year Book. Vol. V. Boston, 1878.
- Rev. A. B. Nicholson, Lansdowne-Muller's Sanskrit Grammar for beginners.
- Rev. Dr. Baxter, Montreal—Lampe Commentarius-exegeticus Evangelii Joannem. 3 vols. Amsterdam, 1726.
  - " " Trapp's Commentary on the New Testament.
    London, 1865.
  - " " Bengel's Gnomon of the New Testament. 5 vols. Edinburgh, 1857.
    - " Black Letter Bible, by Barker. London, 1620.

#### Donations to the Museum.

From Convocation, 1877, to Convocation, 1878,

- George Bell, Jr., Walkerton, Ont.—Pair of husky boots of Indian manufacture; Indian letter.
- Jas. W. Mason, Kingston, Ont.—Fossil teeth and bones from S. Carolina, employed in making manure, &c.
- Prof. Mackerras, Kingston, Ont.—Head of Rocky Mountain goat.
- Hon. R. Brown, through Dr. Schultz, M.P.—Collection of plants from Quappelle lakes, North-West Territory.
- Rev. J. K. McMorine, M.A., Thunder Bay—His whole collection of Canadian plants, containing many rare and peculiar species, and being upon the whole a very important collection.

# ACADEMIC YEAR.

1878.

Sept 27	Candidates intending to appear at ensuing examinations required to intimate in writing their intention to the Registrar.
Oct2	Session begins.
3	Matriculation, Pass and Honour Examinations in Arts begin.
7	Examination for Mowat Scholarship.
16	University Day—Registration, &c. Opening Address by Professor Dupuis, A.M., at 8 P.M.
Nov4	Matriculation and Pass Examinations in Theology begin.
18	Holiday.
Dec 20	Christmas Holidays begin.
	1879.
Jan7	Classes re-open.
10	Statutory Meeting of Senate.
Feb3	Holiday.
12	Time for receiving Theses for M.D. expires.
March3	Holiday.
13	Time for receiving subjects of Theses for M.A. expires.
31	Notices of intention as to ensuing Examinations required.
April 4	Class-work in Arts closes.
9	Time for receiving Theses for M.A. expires.
11	Class-work in Theology closes.
10	Pass and Honour Examinations in Arts begin.
18	Pass Examinations in Theology begin.
28	Statutory Meeting of Senate for conferring Degrees, &c.
30	Convocation for destributing Prizes, announcing Honours, laureating Graduates, and electing Fellows.

# GENERAL ANNOUNCEMENTS.

QUEEN'S COLLEGE has, under its Royal Charter, "the style and privileges of a University."

The thirty-eighth session will be opened on the first Wednesday (2nd) of October, 1878, at 3 o'clock P.M.

Kingston is easily accessible on account of its central situation, and is one of the healthiest localities in Ontario.

Students are particularly requested to give attention to the contents of the following pages, as all intimations shall be strictly adhered to.

A complete compilation of statutes and by-laws, containing information as to scholastic requirements and defining the duties of students, is published separately. The regulations in the compilation are applied consistently with any changes introduced into the Calendar. Copies may be obtained on application to the Registrar.

Boarding.—No student is allowed to board or lodge in any house not approved of by the Senate, except by permission of parents or guardians given in writing. Information as to approved houses may be obtained from the Registrar. The expense of suitable boarding is moderate.

REGISTRATION.—All students are required to have their names with other particulars entered in the University Register. At the time of registration they must produce the Treasurer's receipt for fees. Intrants must also present a certificate of character from their ministers or other competent persons, and sign a declaration promising due respect and obedience to

the University authorities, diligent attention to their studies, and a courteous behaviour towards their fellow-students.

ATTENDANCE AT CHURCH.—All students must attend the churches to which they profess to belong, and produce certificates of attendance from their clergymen when required.

THE LIBRARY contains 11,000 volumes. All registered students are entitled to the use of it, subject to by-laws.

THE OBSERVATORY.—In 1855 subscribers aided by the City Corporation founded an Astronomical Observatory, which was transferred by deed to the University in 1861.

THE MUSEUM.—The Mineralogical and Palæontological collections are extensive and valuable. Occasional demonstrations are given to students. Friendly services towards the furnishing and enlargement of the Museum are solicited.

ACADEMIC COSTUME.—The dress so far as it is common to members of the University, without respect to rank, consists of black gown with long sleeves and cap with one tassel.

The gown worn by undergraduates has red trimming on the front and sleeves.

The distinctive part of the costume of Graduates is in the hood as follows:—B.A., black, bordered with red silk; M.A., scarlet; B.Sc., black, lined with light blue, bordered with white; M.D., scarlet, bound on edge with white; B.D., white, with crimson flush border; D.D., black, with white lining; LL.D., black silk, lined with blue silk.

FEES.—The following fees are payable strictly in advance—class fees on University Day (16th October); graduation fees before Convocation Day.

A single class, any number of sessions	5 00
Registration, per session	4 00
	2 00
Matriculation Examination	1 00
Pass Examination	
Graduation Fee, Bachelor of Science (B.Sc.)	
" Bachelor of Arts (B.A.)	00
" " Master of Arts (M.A.) 20	00 0
Bachelor of Divinity (B.D.)	0.00
Admission ad eundem gradum, B.A	0 00
" M.A	0 00

# FACULTY OF ARTS.

### ORDINARY COURSE.

#### MATRICULATION.

- I. There shall be a Matriculation Examination for students entering upon the ordinary course of study, on passing which they shall be admitted to the rank of Undergraduates.
- II. The Examination shall be in writing, and the subjects of examination shall be the following:—

LATIN.—Virgil, Æneid, Bk. II.; Cicero pro Leg. Manil.; translation of English into Latin prose.

GREEK.—Grammar; Lucian, Charon; Homer, Iliad, Bk. I.

Candidates may profess similar portions of other Classical works, but in so doing cannot compete for rank or Scholarships.

ARITHMETIC.—As far as the Extraction of Roots, inclusive.

ALGEBRA.—To end of Simple Equations.

GEOMETRY.-Euclid, Books I and II.

ENGLISH.—Grammar, and Composition.

- III. In order to pass the Examination, candidates must obtain at least one-fourth of the marks alloted to each subject.
- IV. Candidates passing the above Examination rank as undergraduates. A student passing in any subject may attend the class connected therewith, and is eligible for a Scholarship.
- V. Ungrammatical language, incorrect spelling, or illegible writing shall be a sufficient reason for rejecting the papers of candidates.
- VI. Candidates who have passed the High School Intermediate are examined only in Classics; but if they desire to compete for rank or Scholarships they must take the full Examination.

The Examination for 1878-79 will begin in the Convocation Hall on the 3rd of October.

#### CURRICULUM FOR GRADUATION.

- I. The Ordinary Curriculum with a view to the degree of Bachelor in Arts (B.A.), (except as provided in the next regulation), shall extend over four sessions, and shall include attendance for not less than one session on each of the following classes, namely, Junior Latin, Junion Greek, Junior Mathematics, Senior Latin, Senior Greek, Senior Mathematics, Chemistry, Logic and Metaphysics, Ethics, Natural Philosophy, Rhetoric and English Literature, not less than one session in either of the classes of History or Natural Science, and not less than one session in either of the classes of French, German, or Junior Hebrew.
- II. Any intrant, who shall satisfy the Senate, on examination, that he is qualified to attend the senior classes of Latin, Greek and Mathematics, or any one of these classes, may be admitted into such class or classes without being required to attend the junior class or classes, and when a student shall be thus admitted to the senior classes of both Latin and Greek, his course of study for the degree of Bachelor of Arts may be completed within three sessions.
- III. Candidates for graduation must take the class of Senior Mathematics before the class of Natural Philosophy, the class of Logic and Metaphysics before that of Ethics, and the class of Chemistry before that of Natural Science.
- IV. Except as provided in preceding regulations, the classes may be taken in any order, and any student not intending to graduate may, on payment of the required fees, be enrolled in any class or classes which he may desire to attend.
- V. In each class occasional examinations in writing, held at such times as the Professor may appoint, shall form part of the work of students who follow the ordinary curriculum, but the number of such examinations in any class during a session shall not exceed the number of hours per week at which that class is required to meet.
- VI. Arrangements shall be made for Pass examinations in April and October on such days and at such hours as the Senate shall appoint.
- VII. When a student, who is a candidate for graduation, shall have completed the required attendance on any class he

must present himself for examination on the subject or subjects taught in that class at either the first or second Pass Examination which shall occur next after the completing of his attendance; but he shall not be allowed to appear for examination on such subject or subjects, at any subsequent Pass Examination, unless with special permission of the Senate granted on account of sickness or some similar cause duly certified.

VIII. In order to pass on a subject or subjects taught in any class, candidates must obtain at least one-third of the number of marks obtainable.

To those who desire to take only a part of the course the greatest freedom is allowed in the selection of classes.

Students preparing for the ministry, and not desiring to take a degree, are required to attend only such classes and pass such examinations as the Church may prescribe.

Matriculation, when practicable, is advisable, and confers certain advantages, but it is not essential even for students intending to graduate. Thus if a student, having a degree in view, enters the junior classes without matriculating and passes the examination in these classes at the close of the session or at the beginning of the following session, he is admitted to the rank of undergraduate, and is thereafter in all respects as if he had matriculated.

Special subjects of study affect only the few, yet affect these so much that their case claims some consideration in connection with arrangements suited to the majority. The regulations respecting courses for Honours (page 20) and graduation in Science (page 22) are therefore framed for their benefit.

# DEPARTMENTS AND SUBJECTS OF STUDY.

In conducting the student through the following course the Professors endeavour to overtake all the studies prescribed, but they attach much more importance to thoroughness in the manner of working than to the quantity of work done. In all the classes exercises or essays are required, and there are frequent oral examinations. Regular and punctual attendance is strictly insisted upon.

#### I. CLASSICS.

JUNIOR LATIN.—Cicero in Catilinam, I. Virgil, Æneid, Book XII. Horace, Odes. Book III.

Senior Latin.—Virgil, Georgics, Book I. Livy, Book XXII. Tacitus, Agricola. Juvenal, Satire X. Plautus, Aulularia.

JUNIOR GREEK.—Homer, Iliad, Book VI. Lucian, Timon. Gospel by John.

Senior Greek.—Demosthenes, Philip. III. Plato, Apology. Euripides, Alcestis. Sophocles, Antigone. Thucydides, Book I. Acts of the Apostles.

Careful attention is given to the analysis of the portions read, to the composition and prosody of the languages, and to Roman and Greek Antiquities. The affinities of cognate languages are illustrated, and free use is made of the best authorities on philology.

#### II. MATHEMATICS AND NATURAL PHILOSOPHY.

#### Junior Mathematics.

Euclid I-VI; XI, 1-21; XII, 1-2 (Potts, Simpson). Algebra (Wood, Todhunter, Hamblin Smith). Elements of Trigonometry. Exercises.

#### Senior Mathematics.

Plane and Spherical Trigonometry (Snowball). Geometrical Conic Sections (Whewell). Analytical Geometry (Hann). Exercises.

#### Natural Philosophy.

Mechanics (Galbraith and Haughton). Hydrostatics (Phear). Optics (Dupuis). Astronomy (Airey's Lectures).

Lectures on Natural Philosophy with experiments. (Ganot, Deschanel).

#### III. LOGIC AND METAPHYSICS, AND ETHICS.

#### A. Logic and Metaphysics.

Logic.—Text-Book—Whately's Logic.

Metaphysics.—The Lectures embrace:—

FIRST—A critical account of the main philosophical systems of Greece.

Second—A systematic course of Metaphysics:-

I. Idea of Philosophy and its relation to other spheres of knowledge.

1. Relation to (1) Common Consciousness and (2) the Special Sciences.

2. Relation to Religion.

3. Relation to (1) History and (2) the History of Philosophy.

II. Philosophy of Nature. 1. Force. 2. Chemical action. 3. Life.

III. Philosophy of Mind.

1. Anthropology. (1) Natural qualities—(a) Characteristics of the Race, (b) Characteristics of different Races, (c) Characteristics of the Individual. (2) Natural changes—(a) Stages of individual life, (b) Relation of the Individual to the species, (c) Sleep and Waking. (3) Sensitive Life—(a) Sensation, (b) Impulse, (c) Habit.

2. Phenomenology. (1) Consciousness—(a) Sensuous consciousness, (b) Observing consciousness, (c) Cognitive consciousness. (2) Self-

consciousness—(a) Individual self-consciousness, (b) Relative self-

consciousness, (c) Universal self-consciousness.

3. Psychology. (1) Presentation—(a) Sensation, (b) Attention, (c) Perception. (2) Representation—(a) Recollection, (b) Conception—i Association, ii Productive imagination, iii The Sign, (c) Memory—i Retention, ii Reproduction, iii Mechanical Memory. (3) Thought-(a) Understanding, (b) Reason.

4. Ontology. (1) The Mind, (2) The World, (3) God.

5. Transition to Ethics.

#### B. Ethics and Political Economy.

#### The Lectures embrace:

FIRST—A critical outline of the leading Ethical systems of modern times.

Second—A systematic course of Ethics:-

 Man as a natural being. (1) Appetite. (2) Desire. (3) Emotion.
 Man as a moral being. (1) Duty. (2) Will. (3) Freedom.
 Doctrine of Rights. 1. Property. 2. Contract. 3. Crime.
 Doctrine of Duty. 1. Subjective morality—(1) Responsibility, (2) Motives. (3) Conscience. 2. Objective morality—(1) The family, (2) The Civic Community, (3) The State.

v. Relation of Philosophy to other spheres of knowledge. 1. Relation of Morality to Religion. 2. Relation of Philosophy to Theology,

#### IV. CHEMISTRY AND NATURAL SCIENCE.

#### A. Chemistry.

The work consists of lectures, illustrated by experiments, and comprehends:—

- 1. Principles of Chemical Philosophy. 1. Metrical system of weights and measures. 2. Specific weight. 3. Compound and elementary bodies, elements and their symbols. 4. Physical state of matter and nature of gases. 5. Molecules and atoms, Dalton's atomic theory. 6. Atomic and molecular weight. 7. Laws of combination. 8. Notation and nomenclature.
- Molecular Forces. 1. Chemical affinity. 2. Cohesion. 3. Adhesion. 4. Heat, and its place in the general doctrine of energy, (a) Phenomena of expansion, (b) Thermometry, (c) Specific and latent heat, (d) Conduction and convection, (e) Vaporization and ebullition, (f) Sources of heat and heat of combustion. 5. Radiant Forces, (a) Experimental and theoretical consideration, (b) Reflection and refraction. (c) Dispersion and absorption, (d) Spectra and the spectroscope.
- III. Chemistry of the non-metallic elements.
- iv. Chemistry of the metals.
- v. Application of Chemistry to Photography.
- VI. Chemistry of the galvanic battery and electro-chemical decompositions.

Books recommended—Roscoe, Fownes (Bridges), Valentin, Eliot and Storer, Youmans, Miller's Chemical Physics, Lockyer on the Spectroscope.

#### B. Natural Science.

The lectures embrace an outline of the subjects of (I) Botany, (2) Zoology, (3) Mineralogy, and (4) Geology, and are illustrated by diagrams, specimens, photomicrographs, minerals, rocks, and fossils.

- BOTANY.—I. Structural Botany. I. Organography. 2. Vegetable anatomy.
  - II. Vegetable physiology.
  - III. Principles of Systematic Botany.
- ZOOLOGY.—Preliminary considerations. Structural study of the following Groups:
  - I. Protozoa; II. Coelenterata; III. Echinodermata; IV. Mollusca; V. Annulosa; VI. Vertebrata.

General and comparative study in the higher animals, of

- I. The Endoskeleton.
- 2. Nutrition, including Prehension, Digestion, Absorption, Circulation, Respiration and Secretion.
- 3. The Nervous System, including the functions of the Cerebrum, Cerebellum, Medulla Oblongata, and Spinal Cord.
- 4. The organs of special sense, more particularly the eye and the ear.
- MINERALOGY.—I. Crystallography. (1) Crystallization. (2) Fundamental forms, 3. Secondary forms.
  - Physical Mineralogy. Properties brought out by (1) light,
     trial by instruments.
  - III. Chemical Mineralogy. Action of (1) heat, (2) solvents.
  - IV. Metallic ores and their metallurgy.
  - v. Study of more commonly occuring minerals.

Geology.—Origin and structure of the earth—Dynamical Geology—Lithology—Palæontology—Systematic and Chronologic Geology.

Books recommended—Botany (Gray, Balfour, Wood). Zoology, (Milne Edwards by Knox, Dallas, Agassiz and Gould). Mineralogy (Dana, Collins). Geology (Dana, Page).

#### V. HISTORY AND RHETORIC AND ENGLISH LITERATURE.

- HISTORY—Lectures. 1. Ancient History—(1) On the antiquity of man and primitive culture. (2) On the development of Greek and Roman civilization; on the Political Economy of the Greeks.
  - II. Modern History—(1) On the fall of Rome and rise of new nationalities.
     (2) On the progress of civilization in Modern Europe: (3) On the constitutional history of England.

Books recommended—Gladstone's Juventus Mundi, Curtius' History of Greece, Grote's History of Greece, Boeck's Political Economy of the Greeks, Mommsen's History of Rome:—Guizot's History of Modern Civilization, Stubbs' History of the British Constitution, Hallam's and May's History of the British Constitution, Sir James Stephen's Lectures on the History of France.

RHETORIC AND ENGLISH LITERATURE.—Lectures. I. On the philology of the English Language.

II. On English Literature. Text-book—Bain's English Rhetoric and Composition.

Books recommended—Max Muller's Science of Language, Marsh's Lectures on the English Language, Mætzner's English Grammar, Craik's English Literature, Tain's English Literature.

#### FRENCH.

De Fiva's Grammar. Masson's Selections from Modern French Writers. Corneille's Cinna.

Lectures.—I. On the philology of Romance Languages. II. On French Literature.

#### CLASS PRIZES.

Prizes are awarded by the Professors for eminence, according to the standing attained at written examinations, and other class-work, during the Session.

## COURSES FOR HONOURS.

- I. Honours shall be awarded for distinguished merit at examinations, but only in one or more of the following departments, and only when such merit reaches the prescribed standard in all the subjects of a department:—
  - 1. Classics, including Latin and Greek
  - 2. Mathematics and Natural Philosophy.
  - 3. Chemistry and Natural Science.
  - 4. Logic, Metaphysics and Ethics.
  - 5. History, Rhetoric and English Literature.
- II. Examinations for Honours in any department shall be open to candidates only after they complete their attendance on all the classes prescribed for graduation in that department, and provided they appear at the first or second examination for Honours after completing such attendance.
- III. If a candidate shall present himself at the first examination for Honours after completing the prescribed attendance on classes, and shall fail at that examination on any subject or subjects, he may present himself at the next examination for Honours for examination on the subject or subjects on which he may have previously failed.
- IV. First-Class Honours in any department shall be awarded to candidates who obtain one-half the number of marks alloted to each paper and three-fourths of the total number of marks alloted to the department.
- V. Second-Class Honours in any department shall be awarded to candidates who obtain one-half the number of marks alloted to each paper and two-thirds of the total number of marks alloted to the department.
- VI. Honours obtained in any department shall be publicly announced immediately after being awarded, and the names of successful candidates shall be inserted in the first merit lists published thereafter, and again, at the time of graduation, Honour men being graduates shall be announced as having graduated with the Honours obtained by them at any time during their course of study.

Arrangements will be made at the beginning of the Session by the several Professors for occasional meetings with students intending to apply themselves to any portions of the following Honour work.

#### I. CLASSICS.

- Latin.—Cicero pro Archia. Cicero de Oratore, Book II. Horace, Ars Poetica. Terence, Andrian. Lucretius, Book V.
- GREEK.—Homer, Odyssey, Book XII. Demosthenes de Corona. Pindar, Olympic Odes. Æschylus, Prometheus. Herodotus, Book VI. Hesiod, Works and Days.

#### 2 MATHEMATICS AND NATURAL PHILOSOPHY.

- Higher Equations. Analytical Geometry and Trigonometry (Snowball). Differential and Integral Calculus (Duncan, Todhunter, Hall).
- Statics (Earnshaw). Dynamics (Earnshaw). Mechanics. Hydrostatics (Phear). Optics (Potter). Astronomy (Loomis). Newton's Principia (Evans, Frost).

#### 3. CHEMISTRY AND NATURAL SCIENCE.

Candidates are required to show a general acquaintance with—

- I. The principles of Organic Chemistry and Chemical Analysis.
- II. The principles of Botanical classification and the characters of the more prominent orders of plants.
- III. The outlines of Human Physiology and Comparative Anatomy.
- IV. The principles of Mathematical Crystallography and Mineralogical notation.
- V. The Glacial Epoch, Geology of Canada.

Books recommended. I. Fownes, Armstrong, Schorlemmer, Bowman, Fresenius. II. Gray, Balfour. III. Huxley. IV. Tennant, Jamieson, Griffin. V. Croll, Geikie, Chapman.

#### 4. LOGIC AND METAPHYSICS, AND ETHICS.

Class Lectures on the History of Modern Philosophy. Candidates are required to show an accurate knowledge of Plato's "Republic," Descartes' "Discourse on Method," and "Meditations," and Kant's "Critique of Pure Reason," and a more general knowledge of Hume's "Treatise on Human Nature," Vol. I (Green and Grose's Edition).

#### 5. HISTORY AND RHETORIC AND ENGLISH LITERATURE.

Marsh's Anglo-Saxon Grammar. Thorpe's Analecta Anglo-Saxonica.

Battle of Maldon and History of King Lear from Layamon's Brut. Chaucer's Prologue and Knight's Tale. Spencer's "Faerie Queene," Books I and II.

Freeman's "Growth of the English Constitution." Hallam's Constitutional History, Guizot's "Representative Government.

#### 6. POLITICAL ECONOMY.

Candidates are required to show a thorough knowledge of the Principles of

They will be examined on the following books, Political Economy. although a minute knowledge of them is not expected :-

- 1. Adam Smith's Wealth of Nations (Rogers' edition).
- 2. J. S. Mill's Principles of Political Economy.
- 3. I. E. Cairnes' Essays in Political Economy.
- 4. H. Fawcett's Manual of Political Economy.
- 5. W. S. Jevons' Logical Method of Political Economy.
- In addition, they are required to write an essay on the Practical Results of the Free Trade and Protective Systems in England and the United States respectively. The essay must be given in to the Secretary of the Senate not later than April 8th, 1879.

### GRADUATION IN SCIENCE.

- I. The degree of Bachelor of Science (B.Sc.) may be obtained for distinguished merit in either of the following groups of subjects:—
  - A (1. Mathematics and Natural Philosophy. 2. Chemistry and Natural Science.

    - (1. Logic, Metaphysics, and Ethics.
  - B 2. Classics—Latin and Greek.
    - (3. History, Rhetoric and English Literature.
- II. The degree shall be conferred on candidates who, by conforming to the regulations respecting Honours, obtain first-class Honours in each of the departments under group A, provided they shall have completed one session of attendance on the classes of Junior Latin, Junior Greek, Logic and Metaphysics, and on either of the classes of English Literature, French, or German.
- III. The degree shall be conferred on candidates who, by conforming to the regulations respecting Honours, obtain first-class Honours in Logic and Metaphysics, and Ethics, and second-class Honours in Classics, History, Rhetoric and English Literature, provided they shall have completed one session of attendance on the classes of Junior Mathematics, Chemistry, and French or German.
- IV. In case of alumni of former years being graduates in Arts, or of graduates of other Colleges who may be admitted ad eundem gradum (B.A. or M.A.), the conditions on which the degree may be conferred shall be limited to their ap-

pearing at any examination for Honours and obtaining the Honours required by either the second or third of the preceding regulations.

# DEGREE OF MASTER (M.A.)

This degree cannot be taken until after two years from the date of graduation as Bachelor. The candidate must compose a satisfactory Thesis on some subject taught in the Faculty or closely bearing on one of the Departments. Intimation of the subject must be given to the Secretary of the Senate on or before the 13th March, and the Thesis must be in his hands on or before the 7th April.

Graduates of other Colleges are admitted ad eundem gradum (B.A. or M.A.) on producing satisfactory proof of rank and character.

The Degree of Doctor of Laws (LL.D.) is honorary, and is awarded for literary, scientific, or professional distinction.

# FACULTY OF THEOLOGY.

Matriculation and pass examinations begin on Monday, 4th November.

The prescribed order of classes must be observed by all students being candidates for the degree of Bachelor of Divinity.

#### I-DIVINITY.

Lectures on the Evidences of Religion natural and revealed, including the canonicity, authenticity, genuineness and credibility of the Biblical Records; the Inspiration and Authority of the Scriptures; Systematic Theology; the Pastoral Office; and Homiletics—with prelections and examinations on Hill's Lectures in Divinity, Butler's Analogy, and Greek Testament for Doctrinal Exegesis. Students have opportunities of conducting devotional exercises, practising pulpit elocution, and performing missionary work. The course extends over three sessions, that of 1878-79 being the first in order.

#### 2-HEBREW AND CHALDEE.

FIRST YEAR.

Wolfe's Hebrew Grammar. Genesis I, XI—XIV. Psalms XXXI—XXXVI. Translations in Hebrew. SECOND YEAR.

Gesenius' Hebrew Grammar. Exod. VII—XIV. Psalms C—CXX. Translations into Hebrew.

#### THIRD YEAR.

Gesenius' Hebrew Grammar. Prov. XXV—XXVIII. Isaiah XL—LXVI. Translations into Hebrew.

## 3—BIBLICAL CRITICISM.

Tuesday, Wednesday and Friday.

Galatians and Colossians in Greek. Text-book on Biblical Criticism. Lectures
Biblical Introduction.

4—CHURCH HISTORY.

Monday and Thursday.

Killen's Old Catholic Church. Lectures.

The Church requires the following discourses to be delivered during the course:—Homily, and Exegesis; Lecture and Greek Exercise; Sermon, and Hebrew Exercise. Two are required each session in order.

## SUBJECTS OF MATRICULATION EXAMINATION.

Westminster Confession; Hill's Lectures, Bk. I., chaps. 2, 3, 4; Gospel by Mark in Greek and English.

PASS EXAMINATION on the work of the session.

## DEGREE OF BACHELOR OF DIVINITY.

#### REGULATIONS.

- I. Candidates for the Degree of Bachelor of Divinity (B.D.) must be graduates in Arts of this University or of a University whose degrees are recognized for this purpose by the Senate.
- II. The degree shall not be conferred until the candidate has completed his theological curriculum, with a view to the ministry in the Church to which he belongs, and has passed a satisfactory examination in the branches of Theology taught in this University.
- III. The subjects of examination shall be in two departments, the first embracing—(I) Hebrew and (2) the Evidences of Religion and the Inspiration of Scripture; and the second embracing—(I) Church History, (2) Biblical Criticism, and (3) Systematic Theology.
- IV. Candidates who have completed their theological course may be examined in either of these departments, and may defer their examination in the other department, provided their be not a greater interval than two years between their two examinations.
- V. Students who have completed all the sessions but one of their theological course, may be admitted to examination in the first department.
  - VI. A candidate may, subject to the preceding regulations, appear at any University examination in Theology, provided he give two weeks' notice of his intention to the Registrar.

VII. When a student, being a candidate for the degree, shall obtain at a pass examination on any subject two-thirds of the marks allotted to the subject, he may, on recommendation of the examiner, be exempted from further examination on that subject.

#### SUBJECTS OF EXAMINATION.

#### DEPARTMENT I.

- 1. Evidences of Religion, and Inspiration of Scripture.
- 2. Hebrew, Isaiah xl-lxvi. Chaldee, Daniel ii-iii.

#### DEPARTMENT II.

- 1. Church History-Centuries i-iii; the Reformation; the Church in Scotland.
- 2. Biblical Criticism—Epistle to Romans in Greek; Angus' Bible Handbook, ch. iv., Rules of Interpretation; Hammond's Textual Criticism of New Testament. Introduction to Pentateuch and Gospel of John.
- 4. Systematic Theology—Person of Christ, Doctrine of Sin, Doctrine of the Atonement, Justification, Work of the Holy Spirit.

The following books may be consulted:—Paley's Evidences, Butler's Analogy, Tulloch's Burnett Prize on Theism, Mozley's Bampton Lectures on Miracles, Trench on the Miracles (preliminary essay); Westcott on the Canon of the New Testament; Lee on Inspiration; Dorner on the Person of Christ, Liddon's Bampton Lectures on our Lord's Divinity, Tulloch on the Christian Doctrine of Sin, Crawford on the Atonement, Grotius de satisfactione Christi, Hill's Lectures in Divinity, Owen on the Holy Spirit; Keil on the Old Testament and Bleek on the New, Killen's Old Catholic Church, Fisher's History of the Reformation.

# STUDENTS' MISSIONARY ASSOCIATION.

This Association holds a weekly meeting on Saturday morning, in the divinity class-room. In addition to devotional exercises and the ordinary business of the association, reports are read by members from time to time, respecting the fields occupied by them during the preceding summer under the Home Mission Board of the General Assembly. A Sabbath morning prayer meeting is held in the classical room under the management of the association. The association also assists the convener of the Presbytery's Home Mission Committee in filling appointments for Sabbath day services in the neighborhood of Kingston.

# SCHOLARSHIPS, ETC.

#### FACULTY OF ARTS.

Close scholarships are open only to students having in view the ministry of the Presbyterian Church. (See Regulations.)

Scholarships in Arts have *Endowment Nominations* connected with them, securing exemptions from class fees for *one* session and thereby adding from \$18 to \$24 to the given value of each.

- I. Scholarships and Nominations are awarded upon the matriculation examinations. The following are tenable during the first session of the course.
- MOWAT (open).—Founded by late John Mowat, Esq., Kingston. Value, \$50. For best oral examination on Arithmetic. Competition will take place on 7th October.
- Watkins (open only to pupils of Kingston Collegiate Institute).—Founded by late John Watkins, Esq., Kingston. Value, \$80.
- LEITCH MEMORIAL (1) (open).—Founded by subscription. Value, \$57. For best examination in Mathematics.
- McNab and Horton (close).—Founded by Congregation of that name. Value, \$50. For best examination in English.
- Montreal (open).—By subscribers. Value, \$60. For best examination on all the prescribed subjects.
- Tassie Prize (open).—By William Tassie, Esq., LL.D., Galt. Value, \$25. For best papers in Classics. To this prize the Senate adds a nomination to full course in Arts, free of class fees.
- Redden Prize (open).—By James Redden, Esq., Kingston. Value, \$20. For best examination in Latin.

In addition to the above, nine nominations to a full course in Arts, free of class fees—offered by the Hon. Justice Cross, Hugh McLennan, Esq., James McDougall, Esq., A. Mitchell, Esq., John Hope, Esq., J. McLennan, Esq., A. McPherson, Esq., R. Jellyman Esq., and James Benning, Esq., Montreal—will be awarded upon the matriculation examination according to merit.

- 11. The following are awarded upon the pass examinations at the close of the session. Open scholarships gained by students in the last year of their Arts course are paid at once; all others are tenable in the following session—those by theological students subject to matriculation.
- Church Scholarships (close).—There are three of these of the value of \$70 each, provided for out of the scholarship and bursary fund. The subject of examination for one is Junior Classics, for another Rhetoric and English Literature, and for the third Logic and Metaphysics.
- GLASS MEMORIAL (close).—Founded in 1869 by Mrs. Glass, of Sarnia, in memory of her husband, the late Henry Glass, Esq. Value, \$35. Subject of examination, Junior Mathematics.
- Session of St. Andrew's Church, Toronto (close).—Value. \$50. Subject of examination, Chemistry.
- St. Andrew's (close).—Given annually since 1865, by the Students' Missionary Association of the University of St. Andrews, Scotland. Value, \$50. Subject of Examination, Ethics.
- TORONTO (close).—Founded by the Ladies' Association of St. Andrew's Church Toronto. Value, \$60. Subject of Examination, Natural Philosophy.
- KINGSTON (open).—Founded in 1861, by the ladies of Kingston. Value, \$35.
  Subject of examination, French, German, Hebrew successively. French this session.
- McGillivray (open).—Given by Neil J. McGillivray, Esq., B.A., Montreal Value, \$50. Subject of examination, Senior Mathematics.
- Reekie (open).—Given by Robert J. Reekie, Esq., Montreal. Value, \$50. Subject of examination, Natural Science.
- CATARAQUI (open).—Given by a Friend, Kingston. Value, \$50. Subject of examination, History.
- McIntyre (close).—Founded in 1876 by bequest of Mrs. Margaret W. McIntyre, Perth, Ont. Value, \$32. Subject of Examination, Senior Classics.
- Prince of Wales (open to members of the graduating class).—Founded in 1860 by the Prince of Wales. Value, \$60. Subjects of examination, Natural Philosophy, Ethics, Chemistry, and Rhetoric and English Literature.
- Buchan (1)(close).—Founded in 1875 by bequest of the Rev. Alexander Buchan, Stirling, Ont. Value, \$100. Subjects of examination the same as for the Prince of Wales, with the addition of the Acts of the Apostles in Greek.

#### FACULTY OF THEOLOGY.

- I. The following are awarded upon the matriculation examinations, and are tenable during the first session of the course.
- DAVID STRATHERN Dow.—This scholarship was founded in 1876 by a gift of \$1,500 from the gentleman whose name it bears. Value, \$100.
- Dominion.—Founded in 1870 by a gentleman now resident in Nova Scotia.

  Value, \$80. Competitors may belong to any Presbyterian Church in the Dominion.

- Buchan (2).—Founded in 1875 by bequest of the Rev. Alexander Buchan, Stirling, Ont. Value, \$80.
- Leitch Memorial (2).—Founded in 1867, by subscribers in Scotland and Canada, in memory of the late Principal Leitch. Value, \$80. Tenable for three successive sessions, the last of which may be spent at a Scottish University. Candidates must have the degree of B.A., and the successful one will hold it subject to passing the first and second pass examinations of the course. The next competition will take place in November, 1880.

Church of Scotland.—From funds granted by the Colonial Committee. Value, \$60.

- II. The first is awarded to the student of the second year, not already holding a scholarship, who shall pass the best examination in the epistles of Romans and Hebrews in Greek; and the second to the student of the third year similarly situated who shall pass best examination in Ps. I—XXV in Hebrew.
- (1) Church of Scotland.—From funds granted by the Colonial Committee. Value, \$60.
- (2) Church of Scotland.—From funds granted by the Colonial Committee. Value, \$60.

Successful candidates for scholarships awarded on matriculation examinations must, besides passing the examinations, obtain at least one-half of the whole numbers of marks allotted to all the subjects taken together. The minimum qualification for holding scholarships awarded on pass examinations is the obtaining of one-half the number of marks alloted to each subject.

## BURSARIES.

These are awarded to deserving students, who have not obtained scholarships, and who are preparing for the ministry of the Presbyterian Church in Canada. Recipients must sign a written obligation to repay the money should they change their intention with regard to the ministry. Recommendations accompanying contributions for the benefit of particular students, whether matriculants or not, are duly observed. (See By-laws.)

#### UNIVERSITY PRIZES.

The two following are open to all students of Theology who shall be registered for next session:—

- 1. Lewis.—Value, \$25. For the best lecture on II Peter i., 5-7 inclusive.
- Session of St. Andrew's Church, Almonte.—Value, \$25. For best model of prayer for forenoon service.

The five next following are open to all who have been registered students in Arts, Theology, or Medicine in session 1877-78:—

- 3. By the Hon. DAVID L. MACPHERSON, Toronto.—\$25. For the best essay on the Mission of Britain to India.
- 4. By Alexander G. McBean, Esq., B.A., Montreal.—\$25. For the best essay on "The Commercial Products of Coal Tar."
- 5. By Rev. Messrs. Carmichael of Markham and of King.—\$25. For the best essay on the methods of determining the distance of the earth from the sun.
- 6. By DONALD B. MACLENNAN, Esq., M.A., Q.C., Cornwall.—\$25. For the best essay on "The Philsosophy of Sir William Hamilton."
- 7. By Geo. S. Kirkpatrick, Esq., M.P.—\\$25. For the best essay on "Hilder-brand."
- 8. By John Thorburn, LL.D., President of the Ottawa Literary and Scientific Society.—\$40. For the best history of the County of Carleton—the history to contain details of such matters as the origin, characteristics, struggles, etc., of the first settlers; the rise and progress of municipal institutions, mechanics' institutions, benevolent, industrial and other establishments, newspapers, etc.; the first churches, schools, etc.; the development of agricultural and mineral resources; and events of a general character by which the country may have been particularly affected. Any person may compete. Competitive papers must be in the hands of the Registrar, Professor Mowat, not later than the 15th February. The successful history or a copy of it shall be placed in the archives office at Ottawa.

The design of Dr. Thorburn is to initiate a plan for the collection of materials bearing upon the early history of the country. Should this attempt be successful, other counties may be overtaken in the same way, and other parties, or public bodies such as County Councils, may be induced to follow the donor's example.

#### CONDITIONS OF COMPETITION.

- 1. Competitive papers (except for viii, which see), must be given in to the Secretary of the Senate not later than the 15th November.
- 2. Each paper is to bear a motto, instead of the author's name, and to have attached to it a sealed envelope, bearing the same motto and containing a written declaration over the author's signature, to the effect that it is his unaided composition.
- 3. The envelopes attached to successful papers shall be opened and the writers' names made known at the closing Convocation of the session.

- 4. The best productions must be reported by the examiners to be of sufficient merit.
- 5. All successful productions shall be the property of the University and be at the disposal of the Senate.

#### MEDALS.

- Gold Medal in Greek. Given by John Carruthers, Esq. For the best examination in the honour work in Greek, as prescribed for the session. Open to all undergraduates attending classes in Arts.
- Gold Medal in Mathematics. Given by John Carruthers, Esq. For the best examination in the honour work in Mathematics, as prescribed for the session. Open to all undergraduates attending classes in Arts.
- 3. The Mayor's Gold Medal in Mental and Moral Philosophy. Given last session by John McIntyre, Esq., M.A., Mayor of Kingston. For the best examination in the honour work in Logic, Metaphysics and Ethics, as prescribed for the session. Open to all undergraduates attending classes in Arts.
- 4. Gold Medal in Chemistry. Given by the Senate. For the best examination on the honour work in Chemistry, as prescribed for the session. Open to all undergraduates attending classes in Arts or Medicine.
- Gold Medal in History. Given by the Senate. For the best examination on the honour work in History, as prescribed for the session. Open to all undergraduates attending classes in Arts.
- Gold Medal in Political Economy. Given by Wm. H. Fuller, Esq., M.A.
   For the honour work in Political Economy, as prescribed for the session.
   Open to all students attending classess in Arts, Medicine or Theology.

# Royal College of Physicians and Surgeons,

In affiliation with Queen's University.

# TWENTY-FIFTH SESSION, 1878-79.

#### TEACHING STAFF.

JOHN R. DICKSON, M.D., M.R.C.P.L., M.R.C.S. & F.R.C.S., Edin.
(Medical Superintendent Rockwood Asylum.)

Professor of Clinical Surgery and President of the Faculty.

FIFE FOWLER, M.D., L.R.C.S., Edin.

(One of the Surgeons of the Kingston Hospital.)

Professor of Materia Medica and REGISTRAR of the Faculty.

HORATIO YATES, M.D.

(Dean of the Faculty, Chairman of the Board of Governors and Senior Surgeon of the Kingston Hospital.)

Professor of the Principles and Practice of Medicine and Lecturer on Clinical Medicine.

MICHAEL LAVELL, M.D.,

(Physician to the Penitentiary.)

Professor of Obstetrics and Diseases of Women and Children.

MICHAEL SULLIVAN, M.D.

(Surgeon of the Hotel Dieu.)

Professor of Principles and Practice of Surgery and Lecturer on Microscopic Anatomy.

ALFRED S. OLIVER, M.D.

(Jail Physician and one of the Surgeons of the Kingston Hospital.) Professor of the Institutes of Medicine.

THOMAS R. DUPUIS, M.D.

(One of the Surgeons of the Kingston Hospital.)

Professor of Anatomy—Systematic, Descriptive and Surgical, and Lecturer on Clinical Surgery.

NATHAN F. DUPUIS, M.A., F.B.S., Edin.

(Professor of Chemistry and Natural Science in Queen's University.) Professor of Chemistry and Practical Chemistry.

KENNETH N. FENWICK, A.M., M.D., M.R.C.S.E.

Professor of Medical Jurisprudence and Sanitary Science.

GEO. C. T. WARD and R. N. HORTON.

Associate Demonstrators of Anatomy.

N.B.—Students attend the Lectures on Botany at the University, and can, if they wish, attend those on Zoology also, without additional charge.

#### ANNOUNCEMENT.

The Medical School at Kingston will enter upon its Twenty-Fifth term on the first Wednesday in October next, and continue open for six months.

This School being separately incorporated under the title of the "ROYAL COLLEGE OF PHYSICIANS AND SURGEONS, KINGSTON," and possessing independent powers and privileges, is competent to confer upon its own students and others the Diploma of "Licentiate" and of "Fellow" of the College, and being moreover, affiliated with Queen's University, its students obtain the Degree of *Doctor of Medicine* from the latter Institution, upon passing the requisite examination.

Certificates of attendance at this College are recognized by the Royal College of Surgeons of London and Edinburgh, so that those holding the License of this College as well as those possessing the Degree of M.D. from Queen's University, are entitled to all the privileges in Great Britain that are accorded to the students and graduates of other Colonial Colleges.

THE COLLEGE BUILDINGS, situated at the foot of Princess Street, having recently undergone a thorough course of repairs and having been fitted up at considerable expense, will be found to be commodious and comfortable, and to offer every convenience requisite in a Medical School.

The class-rooms are well adapted to the requirements of both Teacher and Pupil, being large, conveniently seated, well warmed, lighted, and ventilated. A spacious waiting-room also adds greatly to the comfort of all parties. The Materia Medica and Chemistry class-rooms are provided with abundance of materials for examination and experiment; and facilities are afforded in all the class-rooms for a thorough and efficient course of instruction.

The Dissecting Room is large and comfortable, and being situated in the uppermost part of the building, is free from

noise and intrusion. It is thoroughly lighted and ventilated, and furnished with all the necessary appliances for making proper dissections.

On account of the abundant supply of dissecting material furnished by the Penitentiary, Jail, Hospitals, and other public institutions in the neighborhood, this school offers unrivalled advantages for the study of Practical Anatomy; while it is not second to any other Medical School in its advantages for the prosecution of all other branches of medical knowledge.

The Kingston General Hospital and Hotel Dieu, both within a few minutes walk of the College, are open to the visits of students, and offer every advantage desired in the way of Clinical Instruction. Students can, if they desire, visit also the Penitentiary Hospital with Dr. Lavell, and the Insane Asylum with Dr. Dickson.

The General Hospital alone has accommodation for 150 beds, and contains in the "Watkins Wing" an operating amphitheatre, so arranged as to afford all the students an opportunity of witnessing the operations; the other institutions referred to have a large number of patients constantly under treatment.

As proofs of the quality of the instruction given in this School, the Faculty points with pride to the high position taken by its students at the examinations of the Medical Council of Ontario, and of the Royal College of Surgeons of England, and also to the professional success of its graduates in competition with those of other Canadian Colleges.

Kingston, moreover, is a very healthy and pleasant city, free from the attractive amusements that interfere with study, and the inducements to vice, found in many larger cities, while the cheapness of living therein is such as to commend it to the notice of all intending students of Medicine.

Good board in respectable houses may be obtained at prices ranging from  $$2\frac{1}{2}$$  to \$4\$ per week, and other necessaries at proportionate figures.

# MATRICULATION.

The Matriculation Examination is the same as that required

for the Medical Council of Ontario and similar to that of other Colleges.

This examination and that for the Medical Council will be held in Kingston on the first Tuesday and Wednesday after Good Friday and on the third Tuesday and Wednesday in August of every year. In this examination Writing and Dictation will be included, correct spelling and legible writing will be imperative. The examination will embrace the following subjects:

ENGLISH LANGUAGE, including Grammar and Composition.

ARITHMETIC, including Vulgar and Decimal Fractions.

ALGEBRA,—including Simple Equations.

GEOMETRY—the first two books of Euclid.

LATIN-Grammar and Translation.

And one of the following subjects, the students having the option of naming the one in which he will be examined:

GREEK.

FRENCH.

GERMAN.

NATURAL PHILOSOPHY, including Mechanics, Hydrostatics, and Pneumatics.

The following are the text-books in the various branches enumerated above. Where more than one is named the student may elect which he will be examined in:

- LATIN—Cæsar Commentarii de Bello Gallico, fifth and sixth books; Cicero Manilian Law; Virgil, Æneid, second book.
- b. GREEK—Xenophon's Anabasis, first book.
- c. French-Voltaire; Charles XII. sixth seventh and eighth books.
- d. German—Adler's Reader, first parts.
- e. Natural Philosophy—Peck's Ganot; Sangster's first book; Stewart's Physics.

#### PROVISOS OF THE COUNCIL.

"Evidence of having passed a Matriculation Examination in any of the recognized Medical Institutions of Canada prior to July, 1870, will exempt from Matriculating before the Examiners of the Council, upon payment of Ten Dollars."

"Graduates in Arts, or Students having Matriculated in Arts in any University in Her Majesty's Dominions, are not required

to pass the Matriculation-Examination, but may register their names with the Registrar of the College, upon giving satisfactory evidence of their qualifications and upon paying the Matriculation-fee of Ten Dollars."

Graduates in Arts who have attended a course or courses of Lectures on Botany and Theoretical Chemistry and who have already passed an examination on these subjects will not be required to undergo an examination on these subjects provided they produce tickets proving that they have attended one course of lectures on Botany and two on Theoretical Chemistry.

"Every Medical Student, after Matriculating, shall be registered in the manner prescribed by the Council, and this shall be held to be the preliminary to his Medical studies, which shall only be considered to begin from the date of such Regis-

tration."

## CURRICULUM.

Candidates for either the Degree of the University or the Diploma of the College must have completed a period of four years' study; but in the case of Graduates in Arts, or those who have spent a year's pupilage in the office of a Medical Practitioner, a period of three years' only will be required.

Every Candidate must have given regular attendance in Full Courses of Instruction in the following Departments for the periods stated, during at least three Sessions.

VII. VIII.	Practical Anatomy	Two full Courses of six months each.
IX.	Microscopic Anatomy	25 Lectures.
X. XI. XII. XIII.	Clinical Surgery	
XIV. XV. XVI.	Practical Chemistry	One Course of three months.

The above course of study may have been pursued either wholly in this College, or partly here and partly in some other

recognized Medical School. In the latter case, at least one full session must have been spent in this College, with attendance on at least four of the above six months' courses.

Certificates of attendance on Lectures are received from incorporated Medical Schools in the British Dominions, and others recognized by the British Universities and licensing Colleges. Other certificates of attendance on Lectures may be admitted at the discretion of the Faculty.

All students shall present evidence of their having compounded medicine for a period of six months, in the office of a regularly qualified Medical Practitioner; and they shall present evidence of having attended not fewer than six cases of Midwifery.

### EXAMINATIONS AND GRADUATION.

Every candidate, before the 1st day of March in the year in which he proposes to graduate, must furnish the Registrar of the College with a declaration under his own hand that he is twenty-one years of age, or that he will be so before the day of graduation, accompanied by a certificate of good moral character, a statement of his medical studies, with proper certificates thereto, and a Thesis, composed by himself and in his own hand-writing, to be approved of by the Faculty.

There are two examinations—a Primary and a Final—in each of which candidates are examined both in writing and orally.

The Primary Examination includes Theoretical Chemistry, Anatomy, Institutes of Medicine, Materia Medica and Therapeutics, and Botany. Materia Medica can either be taken at the Primary or Final Examination at the option of the Student.

The Final Examination includes the Principles and Practice of Surgery, Theory and Practice of Medicine, Medical Jurisprudence, Obstetrics, Clinical Medicine, Clinical Surgery, Practical Chemistry and Toxicology.

With the exceptions already mentioned Students will not be admitted to the Primary Examination before the end of their third session. The Final Examination will not take place until the candidate has completed his fourth or last Session. The

foregoing examination is required both for the Diploma of Licentiate of the Royal College, and for the Degree of Doctor of Medicine of the University.

# REQUISITES FOR THE FELLOWSHIP.

Before being admitted to the Professional Examination for the Diploma of F.R.C.P.S.K., the candidate must produce evidence of being a graduate in Arts, (or undergo an examination equivalent thereto,) and of having been engaged in the practice of the profession at least five years.

#### FEES.

The Fees for the different classes, etc., are as follows:

Registration Fee for each session
Anatomy(per session)12 00
Institutes of Medicine
Principles and Practice of Surgery "" " 12 00
Theory and Practice of Medicine " " 12 00
Obstatrics and Diseases of Women "" "
Chemistry " " T2 00
Medical Jurisprudence "" " 6 00
Practical Anatomy " " 6 oo
Practical Chemistry (each course)
Clinical Medicine (for two courses) 6 oo
Clinical Surgery " " 6 oo
Botany
Sanitary Science
Histology
4 00

Payment for two full courses in any class and attendance in the same, entitles the student to a perpetual ticket for that class; except Practical Anatomy, in which payment is required every year, and Practical Chemistry, and Botany in each of which payment once is sufficient.

The Kingston General Hospital may be attended by students during their whole period of study for one payment of \$6.00 at the commencement, or \$4.00 per session.

Diploma of Licentiate of the College\$20	00
Degree of M.D	00
Fellowship of College	00

All fees are payable to the Registrar of the College, Dr. Fowler, and are expected to be paid in advance.

### COURSE OF INSTRUCTION.

### I. ANATOMY—(Prof. T. R. Dupuis.)

Five Lectures a week are given on this subject in the general class-room, and are illustrated by plates, drawing, and preparations, but chiefly and fully

by recent dissections on the Cadaver.

Two of the best disectors among the third year students, are chosen each session as *prosectors* who, under the direction of the Professor, make careful dissections of the parts to be brought before the class, so that the students not only hear a description of them but also see them properly dissected and lying in their natural relations to each other.

# 2. INSTITUTES OF MEDICINE—(Prof. Oliver.)

This course comprises Physiology, and General Pathology. The lectures will be illustrated by vivisections, plates, drawings, and specimens from the Museum.

# 3. MATERIA MEDICA, THERAPEUTICS & PHAR-MACY—(Prof. Fowler.)

This course will be illustrated by plates, and specimens of the various drugs, chemicals, etc.

# 4. PRINCIPLES AND PRACTICE OF SURGERY— (Prof. Sullivan.)

These Lectures embrace the Principles and Practice of Surgery and Surgical Anatomy. The course will be illustrated by plates and models, and pathological specimens. The use of insrruments and surgical apparatus, and appliances are taught; and all the chief operations will be performed upon the Cadaver in presence of the class.

# 5. THEORY AND PRACTICE OF MEDICINE—(Prof. H. Yates.)

These Lectures are illustrated by plates, morbid specimens, and models of diseased parts.

# 6. OBSTETRICS AND DISEASES OF WOMEN—(Prof. Lavell.)

These Lectures are illustrated by drawings, models, prepared specimens, by the use of the Artificial Pelvis, &c.

Ample opportunities will be afforded to the students for studying this important branch practically, as they will be arranged in classes to attend the Obstetric practice of the Hospital.

# 7. CHEMISTRY—(Prof. N. F. Dupuis.)

This course comprises Chemical Physics. Chemical Philosophy, Inorganic and Organic Chemistry,

The Professor possesses abundant apparatus for experimental illustration being completely furnished with all the modern inventions for chemical investigation. All the Lectures are fully illustrated by actual experiments.

## 8. BOTANY—Prof. N. F. Dupuis.)

The Lectures will be given every day during the first part of the session at the University Buildings and will be illustrated by drawings, microscopic sections, dried specimens and living plants as far as practicable.

# 9. MEDICAL JURISPRUDENCE—(PROF. FENWICK.)

These Lectures include Medical Toxicology, post mortem appearances, &c., together with Insanity and Medical Police. They are illustrated by plates and specimens when necessary.

# 10. PRACTICAL ANATOMY—(GEO. C. T. WARD AND R. N. HORTON, Demonstrators.)

The Dissecting Room will be open from 8 a.m. to 6 p.m. for the use of students; and the Demonstrators will attend every day from to 2 to 4 p.m., to give instructions in dissecting, and in the details of Practical Anatomy, and to see that all students are furnished with material for dissection, of which there is always an abundant supply in this Institution.

# II. PRACTICAL CHEMISTRY—(Prof. N. F. Dupuis.)

Thorough instruction is given in the splendid new Laboratory of the College under the personal supervision of the Professor. The course includes blow.pipe manipulations, the use of apparatus, testing, qualitative and quantitative analysis, toxicological investigations, etc.

# 12. CLINICAL MEDICINE—(Prof. H. YATES.)

This is taught by instruction at the bed-side, and by lectures in the new Theatre of the Hospital.

Attention is given to Physical Diagnosis, which is taught practically, each student being required to take part in it. Examinations of urine, sputa, etc., are illustrated and explained.

# 13. CLINICAL SURGERY—(Prof. T. R. Dupuis.)

These Lectures are in illustration of the various surgical cases in the wards of the General Hospital. They are given at the bed-side or in the Theatre of the Hospital, and when requiring it, are elucidated by plates, surgical apparatus, morbid specimens, models, etc. All operations are performed in presence of the class.

# 14. MICROSCOPIC ANATOMY—(Prof. Sullivan.)

# 15. SANITARY SCIENCE—(Prof. Fenwick.)

# BOOKS RECOMMENDED TO STUDENTS.

Anatomy.—Gray, Wilson (latest edition), Quain, Ellis and Heath.

Institutes of Medicine.—Dalton's and Kirke's Physiology and Bennett's and Aitken's Pathology, and Parke's Hygiene.

MATERIA MEDICA.—Pereira's Materia Medica (abridged.)

Principles and Practice of Surgery.—Erichsen, Holmes, Bryant, Pirrie, Gross, Smith, Druitt.

THEORY AND PRACTICE OF MEDICINE.—Tanner's and Flint's Practice and Reynold's System of Medicine.

Obstetrics.—Ramsbotham's Churchill's or Tyler Smith's Midwifery, and Thomas or Churchill on Diseases of Women; Tanner on Diseases of Children.

CHEMISTRY.—Fownes, Miller, Roscoe, McAdam, Bowman, Fresenius, Remsen.

BOTANY.—Gray's Structural and Systematic Botany; First Lessons in Botany.

MEDICAL JURISPRUDENCE.—Taylor's Medical Jurisprudence.

SANITARY SCIENCE .-

MICROSCOPIC ANATOMY.—Carpenter, Hogg, Beale.

# NOTICE.

The Medical Examinations of the Medical Council will be held in the City of Kingston as well as in Toronto, so that students of this College will be saved the trouble and expense of attending examinations in Toronto.

# Honour, Pass and Prize Lists.

# SESSION 1877-78.

#### FELLOWS.

ARTS-Rev. Malcolm Macgillivray, M.A., Woburn, Ont.

THEOLOGY—Rev. John C. Baxter, D.D., Montreal.

Law-William Tassie, LL.D., Galt.

MEDICINE-Michael Sullivan, M.D., Kingston.

#### GRADUATES.

(Alphabetical order.)
Bachelors of Arts.

James H. Ballagh, George Bell, John Chisholm, John G. Creeggan, James W. Curry, D. A. Givens, James A. Grant, Frederick C. Heath, Andrew Love, Duncan MacArthur, George Macdonald, James W. Mason, Donald McCannel. Alexander McLean, Malcolm S. Oxley, Gilbert C. Patterson, George Ritchie, James Ross, Thomas Scales, George M. Thompson, also Rev. John Gallaher.

#### BACHELORS OF SCIENCE.

George Macdonald, George Ritchie.

#### MASTERS OF ARTS.

John Ferguson, B.A., John B. McLaren, B.A., John Mordy, B.A., Alex. H. Scott, B.A.

#### DOCTORS OF MEDICINE.

Thomas W. Beeman, Henry Bennett, George Clinton, Hugh A. Craig, Henry A. Evans, William B. Kennedy, Peter E. Kidd, Willson Frederick Lewis, Dennis P. Lynch. James Macarthur, B.A.

#### DOCTORS OF DIVINITY.

Rev. John C. Baxter, Montreal; Rev. Wm. Fraser, Bondhead; Rev. Robt. Sedgewick, Musquodoboit, N.S.; Rev. Thomas Wardrope, Guelph.

#### HONOUR MEN IN ARTS.

- George Macdonald, First class in Logic and Metaphysics, Ethics, History, Rhetoric and English Literature.
- George Ritchie, First class in Logic and Metaphysics, Ethics, History, Rhetoric and English Literature.
- Finlay M. MacLennan, First class in Mathematics and Natural Philosophy.

David A. Givens, First class in Mathematics and Natural Philosophy.

#### GOLD MEDALISTS.

George Macdonald, Logic, Metaphysics, and Ethics (the Mayor's medal.)

Finlay M. MacLennan, Mathematics (Carruthers medal.)

William Briden, Greek, (Carruthers medal.)

#### PASSMEN IN ARTS.

Examinations in October 1877, (order of merit.)

JUNIOR MATHEMATICS-James Awde.

SENIOR MATHEMATICS—James Awde.

NATURAL PHILOSOPHY—I. James W. Mason. 2. Malcolm S. Oxley.

CHEMISTRY-Joseph McCormick.

Logic And Metaphysics—1. George M. Thomson. 2. James W. Curry.

RHETORIC AND ENGLISH LITERATURE—James W. Curry.

French—James W. Curry.

# Examinations in April 1878 (order of merit.)

- Junior Latin—I. Adam R. Linton. 2. Bidwell N. Davis. 3. Daniel McTavish. 4. Henry C. Fowler. 5. Herbert M. Mowat. 6. H. H. T. Shibley. 7. James Hutcheson. 8. John P. Hume. 9. Robert G. Feek. 10. William J. McCuaig. 11. William G. Brown. 12. Peter M. Pollock. 13. Gilbert C. Patterson. 14. Alexander MacTavish. 15. James Smith. 16. James R. O'Reilly. 17. James Sommerville.
- Junior Greek—I. Daniel MacTavish.
  2. Adam R. Linton.
  3. Henry H. T. Shibley.
  4. Bidwell N. Davis.
  5. John P. Hume.
  6. Herbert M. Mowat.
  7. Henry C. Fowler.
  8. Robert G. Feek.
  9. John Moore.
  10. William J. McCuaig.
  11. Alexander MacTavish.
  12. Jay N. Taft.
  13. James Sommerville.
  14. James Smith.
- Senior Latin—1, William Briden. 2. Archibald B. McCallum. 3. James Downing. 4. John McArthur. 5. Julien D. Bissonnette. 6. Matthew McKay. 7. Marcus S. Snook.
- Senior Greek—I. William Briden. 2 Julien D. Bissonnette. 3. Hugh H. Mc Millan. 4. James Downing. 5. Archibald B. McCallum. 6. John McArthur. also Malcolm S. Oxley.
- Junior Mathematics—I. John P. Hume. 2. Daniel McTavish. 3. Bidwell N. Davis. 4. James Hutcheson, William G. Brown, (equal). 5. Adam R. Linton. 6. William J. McCuaig. 7. Henry C. Fowler. 8. Henry H. T. Shibley. 9. Robert G. Feek. 10. James Smith. 11. Alex. MacTavish. Herbert M. Mowat, (equal.)

- Senior Mathematics—1. William Briden. 2. Hugh H. McMillan. 3. Julien D. Bissonnette. 4. George M. Thomson, James Downing, (equal.) 5. Marcus S. Snook, Thomas A. Elliott, (equal). 6. Wilber Daly.
- NATURAL PHILOSOPHY—I. Finlay M. MacLennan. 2. David A. Givens. 3. William Stewart. 4. George Macdonald. 5. George M. Thomson. 6. Joseph McCormick. 7. James A. Grant. 8. Donald McCannel. 9. Jas. W. Curry. 10. John Chisholm and Jas H. Ballagh, (equal.)
- LOGIC AND METAPHYSICS—I. Archibald B. McCallum, Wm. Stewart, (equal.) 2. Finlay M. MacLennan. 3. Hew Ramsay Duff. 4. Matthew McKay. 5. Alexander McLean. 6. Joseph McCormick.
- ETHICS—I. George Macdonald. 2. James Awde. 3. George Ritchie. 4. James Ross. 5. George Bell. 6. James A. Grant. 7. David A. Givens. 8. Malcolm S. Oxley. 9. Donald McCannel. 10. Andrew Love. 11. John G. Creeggan. 12. Thomas Scales. 13. George M. Thomson. 14. James W. Mason. 15. John Chisholm. 16. Duncan Macarthur. 17. James H. Ballagh. 18. James W. Curry. 19. Fred. C. Heath. 20. Wilber Daly.
- RHETORIC AND ENGLISH LITERATURE.—I. James Awde. 2. Archibald B. Mc-Callum. 3. David A. Givens. 4. Julien D. Bissonnette. 5. John Mc-Arthur. 6. Hugh H. McMillan. 7. Donald McCannel.
- HISTORY—I. James Ross. 2. George Ritchie. 3. Adam R. Linton. 4. George Bell. 5. Daniel McTavish. 6. Henry H. T. Shibley. 7. Thos. A. Elliott, 8. Peter M. Pollock. 9. Alex. McLean. 10. James Sommerville. 11. James Smith. 12. George McArthur.
  - NATURAL SCIENCE—I. Thomas Scales. 2. William Stewart. 3. Fred. C. Heath 4. Hew Ramsay Duff. 5. Finlay M. MacLennan. 6. George Bell. 7. James W. Curry. 8. Duncan Macarthur. 9. Matthew McKay. 10. Donald McCannel. 11. James W. Mason. 12. Jno. Chisholm. 13. John C. Creeggan. 14. Joseph McCormick.
  - CHEMISTRY—I. James V. Anglin. 2. David A. Givens. 3. James Awde. 4. Donald McCannel. 5. William Briden. 6. James W. Mason. 7. James Downing. 8. Hugh H. McMillan. 9. Marcus S. Snook. 10. George McArthur.
  - GERMAN—I. Bidwell N. Davis. 2. John P. Hume. 3. David A. Givens 4. Henry C. Fowler. 5. Marcus S. Snook. 6. James A. Grant. 7. Robert G. Feek. 8. Herbert M. Mowat. 9. Malcolm S. Oxley. 10. Jas. H. Ballagh. 11. Jay N. Taft.
  - [UNIOR HEBREW-1. Andrew Love. 2. James Awde. 3. J. N. Taft.

#### PASSMEN IN THEOLOGY.

- Hebrew—Junior Division—I. Gilbert C. Patterson. 2. James Cumberland, Senior Division—I. John Ferguson. 2. Hugh Cameron. 3. James G. Stuart.
- Biblical Criticism—i. John Ferguson. 2. Hugh Cameron. 3. James G. Stuart. 4. Gilbert C. Patterson. 5. James Cumberland.
- Church History—I. John Ferguson. 2. Hugh Cameron. 3. James G. Stuart. 4. Gilbert C. Patterson. 5. James Cumberland.
- Pastoral Theolofy—I. John Ferguson. 2. James G. Stuart. 3. Gilbert C. Patterson. 4. James Cumberland. 5. Hugh Cameron.
- EVIDENCES OF RELIGION—I. John Ferguson. 2. James G. Stuart. 3. Hugh Cameron. 4. James Cumberland. 5. Gilbert C. Patterson.

Systematic Theology—1. John Ferguson. 2. James G. Stuart. 3. Gilbert C. Patterson. 4. Hugh Cameron. 5. James Cumberland.

#### PASSMEN IN MEDICINE.

• Primary Examination.
(Alphabetical order.)

R. A. Abbott, Henry Bennett, J. C. C. Cleaver, W. F. Cleaver, P. C. Donovan, W. H. Henderson, Robert N. Horton, Thos. R. Hossie, Geo. W. Judson, Roland K. Kilborn, W. A. Lafferty, A. R. Leonard, Jas. A. McCammon, George Newlands, George C. T. Ward.

Final Examination.

The ten medical graduates named above.

#### SCHOLARSHIPS.

Gained at the matriculation examinations in October and November 1877, and paid during session 1877-8.

#### ARTS.

- 1. St. Paul's-\$60-Adam R. Linton with honour of Mowat.
- 2 Lettch Memorial—(1)—\$57—John P. Hume.
- 3. Watkins-\$80-Henry H. T. Shibley.
- 4. McNab and Horton-\$50-Daniel McTavish.
- 5. Mowat-\$50-William J. McCuaig.

#### THEOLOGY.

- 1. \*Leitch Memorial—(2)—\$80—Archibald A. Mackenzie.
- 2. Dow—\$90—Joseph F. White.
- 3. Dominion—\$80—Gilbert C. Patterson.
- 4. Buchan—(2)—\$80—James Cumberland.

\*Tenable for three years.

## Gained at the pass examinations in April 1878.

#### ARTS.

Church—(1)—\$70—(Junior Classics), Daniel McTavish with honour of Glass Memorial.

Church—(2)—\$70—(Rhetoric and English Literature), Arch. B. McCallum with honour of Church (3) and McIntyre.

Church—(3)—\$70—(Logic and Metaphysics) Matthew McKay.

Glass Memorial—\$70—(Junior Mathematics), Adam R. Linton, with honour of Senate.

St. Andrew's Toronto—\$50—(Chemistry), Donald McCannell.

St. Andrew's University-\$50-(Ethics), James Ross.

Toronto-\$60-(Natural Philosophy), George M. Thomson.

Kingston-\$35—(Junior Hebrew), Andrew Love.

Montreal-\$50-(Senior Mathematics), William Briden.

Rcekie-\$50-(Natural Science), Thomas Scales.

Cataraqui-\$50-(History), George Ritchie.

McIntyre-\$32—(Senior Classics), J. D. Bissonnette.

Prince of Wales—\$60—(Natural Philosophy, Ethics, Chemistry, Rhetoric and English Literature), David A. Givens.

Senate-\$35-(Junior Classics), B. N. Davis.

Special-\$32-(Rhetoric and English Literature), John McArthur.

#### THEOLOGY.

Church of Scotland—(1)—\$70—John Ferguson.

(2)-\$60-James G. Stuart.

(3)—\$50—Hugh Cameron.

#### UNIVERSITY PRIZES.

- Nomination to a free course in Arts (gained according to rank at the matriculation examination)—(1) By David Allan, Esq., Montreal—H. C. Fowler. (2) By James Croil, Esq., Montreal—H. M. Mowat. (3) By Rev. D. M. Gordon, B.D., Ottawa—R. G. Feek.
- Tassic Prize—for best matriculation examination in classics (given by William Tassie, LL.D., Galt), \$25—Adam R. Linton.
- 3. Almonte Prize, \$20—for best model of a prayer for public worship (given by the session of St. Andrew's Church, Almonte)—Alex. H. Scott, B.A.
- 4. McBean Prixe, \$25—for best essay on the modern doctrine of energy (given by Alex. G. McBean, Esq., B.A., Montreal)—George Bell.
- 5. Lewis Prize, \$25—for best lecture on Matt. viii. 7-12—John Ferguson, B.A.
- Malloch Prize, \$25—for best essay on the life and discoveries of Galileo— Daniel McTavish.
- Maclennan Prize, \$25—for best essay on the nature and influence of the philosophy of Des Cartes—George Ritchie.

#### PRINCE OF WALES PRIZEMEN.

1868-9—Robert Crawford, Kingston.

1869-70—Thomas H. McGuire, Kingston.

1870-1—Hugh Urquhart Bain, Perth.

1871-2—Archibald P. Knight, Renfrew.

1872-3—William Arthur Lang, Almonte.

1873-4—Donald Malcolm McIntyre, Kingston.

1874-5—Thomas Dickie Cumberland, Rosemont.

1875-6-John Brown McLaren, Kingston.

1876-7-John Reeve Lavell, Kingston.

1877-8-David Alexander Givens, Kingston.

#### CLASS PRIZEMEN.

Students whose names have an asterisk prefixed received prizes in books besides merit certificates. The numbers following the names denote the percentage of the aggregate marks obtained at the monthly written examinations during the session.

- JUNIOR LATIN.—I. \*Daniel McTavish, 1st prize (86).
   2. \*H. C. Fowler, 2nd prize (84).
   3. J. P. Hume (83).
   4. H. H. T. Shibley (82).
   5. Herbert M. Mowat (81).
   6. B. N. Davis (77).
   7. James Hutcheson (76).
   8. R. G. Feek (73).
- Junior Greek.—i. \*H. C. Fowler, 1st prize (80).
   2. \*Herbert M. Mowat, 2nd prize (79).
   3. H. H. T. Shibley (77).
   4. B. N. Davis (77).
   5. D. McTavish (75).
   6. J. P. Hume (72).

SENIOR LATIN.—\*William Briden, 1st prize (90).

SENIOR GREEK.—I. \*William Briden, 1st prize (88). 2. H. H. McMillan (73). 3. J. D. Bissonnette (70).

JUNIOR MATHEMATICS—1. \*John P. Hume (81). 2. \*Bidwell N. Davis (78).

SENIOR MATHEMATICS-1. \*William Briden (91).

NATURAL PHILOSOPHY—I. \*Finlay Malcolm Maclennan (80). 2. \*William Stewart (76).

Logic and Metaphysics—For written examinations—1. \*Finlay M. Maclennan (78). 2. \*William Stewart (77). 3. \*A. B. McCallum (73).

For best essays during the session—\*William Stewart.

ETHICS—For written examinations—I. \*George Macdonald (95). 2. \*James Awde (90). 3. \*George Ritchie (85). 4. \*David A. Givens (82). 5. \*James Ross (76).

For best essays during the session—1. \*George Ritchie. 2.. \*George Macdonald.

CHEMISTRY—\*J. B. Anglin (78).

NATURAL SCIENCE—I, \*Thomas Scales (85). 2. \*F. C. Heath (83). 3. \*F. L. McLennan (76).

HISTORY—I. \*James Ross (90). 2. \*George Ritchie (87). 3. \*George Bell (85). 4. Henry H. Shibley (77). 5. Daniel McTavish (76).

RHETORIC AND ENGLISH LITERATURE—I. \*James Awde (96). 2. \*Hugh H. Mc-Millan (74). 3. \*Archibald B. McCallum (72). 4. \*Julien D. Bissonnette (70).

GERMAN—\*Bidwell N. Davis (70.)

Hebrew—First year—1 \*Jamés Awde (77), and \*Gilbert C. Patterson (77) equal 2. \*Andrew Love (75). Second year—\*John Ferguson (74).

BIBLICAL CRITICISM AND CHURCH HISTORY—John Ferguson (87).

Systematic Theology--John Ferguson.

Evidences of Religion—1. John Ferguson. 2. James G. Stuart.

PASTORAL THEOLOGY—John Ferguson.

RELATIONS OF SCIENCE AND RELIGION—John Ferguson.

ELOCUTION—Serious selection from Shakespeare—1. J. V. Anglin. 2. M. Gage. Humorous selection from Shakespeare—1. J. N. Taft. 2. T. A. Elliott.

Of the above mentioned prizemen in Arts, Anglin, Bissonnette, Briden, Feek, Fowler, Givens, Heath, Hume, Love, Macdonald, Mowat, Ritchie, Ross, Scales, Shibley, Thomson, were educated at the Kingston Collegiate Institute; McCallum and McTavish at the Galt Collegiate Institute; McCannel and Patterson at the Collingwood High School; Hutcheson at the Brockville High School; Davis at Albert University; McMillan at Vankleek Hill High School; Maclennan and McArthur at Kincardine High School; Stewart at Williamstown High School; Bell at Walkerton High School; Elliott at Quebec High School; Taft at Syracuse University.

# LIST OF STUDENTS SESSION 1877-78.

# IN ARTS.

	Year of
	attendance. Summer residence.
Abbott, Rodney H, Wolfe Island	
*Anderson, Joseph, Heckston, O	
Anglin, James V., Kingston	Kingston.
Awde, James, Portsmouth	3Portsmouth.
Ballagh, James Henry, Port Hope	
Bell, George, Walkerton	4Toronto.
Bennett, Henry, Peferboro	Kingston.
*Bissonnette, Julien Donald, Stirling	Z. Kingston
Briden, William, Odessa	
Brown, William G., Pickering	
*Brownell, James E., Avonmore	
*Chisholm, John, Pictou, N. S	
Cleaver, John C. C., Kingston	
Cleaver, William F., Kingston	Kingston
Coultlie, H. N., Ottawa	Ottown
Countile, H. N., Ottawa	Vilawa.
Creeggan, John George, Kingston	Dont Hone
Curry, James Walter, Port Hope	
Daly, Wilber, Napanee	3Napanee.
*D'Argent, William E., England	4 Wolfe Island.
Davis, Bidwell N., Howe Island	IInverary.
Day, Lewis, Storrington	IKingston.
Donovan, Patrick C., Campbellford	
Downing, James, Kingston	2Simcoe Island.
Duff, Hew Ramsay, Kingston	3Kingston.
Dupuis, James M., Kingston	
Elliott, Thomas A., Brockville	3Brockville.
Feek, Robert George, Guelph	Guelph.
Fowler, Henry C., Kingston	Kingston.
Fry, Charles, Mill Haven	
Gage, Matthew, Kingston	Kingston.
Givens, David A., Kingston	4Kingston.
Grant, James A., Ottawa	4Ottawa.
Heath, Frederick C., Kingston	
Henderson, William H., Kingston	Kingston.
Horton, Robert N., New Dublin	I
Hossie, Thomas R., Perth	I
Hume, John P., Burnbrae	Burnbrae.
Hutcheson, James, Brockville	Brockville.
Jamieson, John, N. Gower	
Judson, Geo. W., Frankville	
Kilborn, Roland K., Frankville	
Knight, John H., Wallaceburgh	
Koyl, Fred. T., Farmesville	Brockville
22012, 22000 20, 20000000000000000000000	

10.7	Year of
I ff , III'II' A Doub	attendance. Summer residence.
Lafferty, William A., Perth	
Leonard, Alonzo, R., Westbrook	IWestbrook.
*Linton, Adam R., Orono	IOrono.
Loring, J. B., Sherbrooke	ISherbrooke, Q.
*Love, Andrew, Scotland	4 Harvey Sta., York Co., N.B.
Macarthur, Duncan, Ailsa Craig	4Ailsa Craig.
Macdonald, George, Wellington	
MacLennan, Finlay M., Kincardine	3Ripley, Ont.
*MacTavish, Alexander, Drummond	
McArthur, Dougall, Kincardine	
*McArthur, George, Kincardine *McArthur, John, Kincardine	77. 1.
McCammon, James A., Gananoque *McCannel, Donald, Collingwood	
	D 11 DO
McCuaig William James Vankleek Hill	
McCuaig, William James, Vankleek Hill	D' . 37.0
*McIntosh, Hugh, Pictou, N. S *McKay, Matthew, Bradford	
*McKay, Matthew, Bradford *McLean, Alexander, Belfast, P.E.I	
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N. 1 . 1 . C	····4····1Kingston.
Oldham, Edmund, Kingston	7.71
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*Pollock, John R., S. Finch	34 - 11 37 75
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C	- D Pl!
Smith, Robert A., N. Williamsburgh	IN. Williamsburgh.
*C '11 XV'11' C C 11 1	
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*C 111 T TT 1 11	ISattock.
C1 - 1 11 C1	IBerwick, Ont.
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*TN T1' . 337 TD .11 '11 .	337 1C 7 1 1
*Th C 34 C 1	4 Morton, Ont.
337 11 IT 1 D 17'	3Victoria, British Columbia.
Walkem, Hugh B., Kingston	yiciona, mitian Columbia,

<sup>\*</sup> Students for the ministry of the Presbyterian Church in Canada.

# IN THEOLOGY.

	Year of
	attendance. Summer residence.
Cameron, Hugh, B.A., Huntingdon, Q	2Carluke, Wentworth Co.
Cumberland, James, B.A., Rosemont	Mono Centre.
Ferguson, John, B.A., Belleville	2Newburgh.
Glassford, Thos. S., B.A., Beaverton	3Summerstown.
Mackenzie, Arch. A., B.A., B.Sc., P. E. I	
McLean, Alex., B.A., Belfast, P.E.I	3Hinchinbrooke
Mordy, John, B.A., Ross	3 Pinkerton, Co. Bruce.
Patterson, Gilbert C., Collingwood	TS. Finch.
Scott, Alex. H., B.A., Martintown	<u>3</u> Owen Sound.
Stuart, Jas. G., B.A., Toronto	
Taylor, Hugh, Scotland	2Kingston.
White, Joseph F., B.A., Whitby	ıSt. Ğeorge, N.B.

# IN MEDICINE.

Name.				Summer residence.
Abbott, R. H.	 • •			Wolfe Island.
Alexander, F. R.	 • •	"	• •	Ottawa.
Beeman, T. W.	 			Selby.
Bennett, Henry	 			Peterboro.
Betts, J. H.	 			Portsmouth,
Brown, Charles	 	• •		Lawrenceville, Q.
Chown, Henry H.	 			Kingston.
Clarke, John G.	 			Lloydtown.
Cleaver, J. C. C.	 			Trinidad.
Cleaver, Wm. F.	 			Trinidad.
Clinton, Geo.	 			Wellington.
Coughlin, Richard	 			Hastings.
Coutlee, H. N.	 			Hull, Q.
Craig, H. A	 			North Gower.
Day, Lewis E.	 			Kingston.
Dickson, C. R.	 			Portsmouth.
Donovan, P. C.	 			Campbellford.
Dupuis, J. M,	 			Kingston.
Empey, Charles T.	 			Kingston.
Evans, Henry A.	 			Lingston.
Galbraith, J. E.	 			Bowmanville.
Henderson, Wm. H	 			Kingston.
Herrington, A. W.	 			Mountain View.
Horton, R. N.	 			New Dublin.
Hossie, T. R.	 			Perth.
Irvine, Wm. H.	 			Elginburg.
Jamieson. John	 			Kars.
Judson, Geo. W.	 			Frankville.
Kennedy, W. B.	 			Pembroke.
Kidd, P. E.	 		٠.	Warsaw.
Kilborn, R. K.	 			Frankville.
Knight, John H.	 			Wallaceburg.
Knox, H.	 			Clarendon.
Koyl, Fred. T.	 			Brockville.
Lafferty, W. A.	 			Perth.
Lavell, Wm. A.	 			Kingston.

Name. Summe	r residence.
Leonard, R. A	K,
Lewis, Fred. W Addison.	
Loring, James B Sherbroo	
Lynch, D. P Allumette	e Island.
Macarthur, James Ailsa Cra	uig.
McCammon, J. A Gananoq	ue,
McConnell, B. J Pembroke	e.
McDowell, John Shanville	, Q.
McPhaden, Murdoch	ne,
Mordy, A. A Almonte.	
Newlands, Geo. jr Kingston	
Odlum, John Lucknow	
Oldham, Edmund Kingston	
O'Shea, James F Norwood	
Patterson, R. L Morpeth.	
Reeve, Henry H Toronto.	
Reid, W, D Kingston	
Rogers, David H Gananoq	
Shannon, L. W Kingston.	
Smith, D. A Bristol, (	
Smith, R. W. B Cataraqu	
Snider, S. H Niagara.	
Stark, A Berwick.	
Stevens, James Kirkdale.	
Stevenson, Thos. G Kingston.	
Symington, Thos. J	
Strange, J Kingston.	
Taggart, C. B Shanville	
Ward, Geo. C. T	
Wilson, Thomas	••

# LIST OF GRADUATES.

Graduates are requested to intimate to the Registrar change of residence or any omissions in the list.

Year of	
Name. Degree. graduation. Present res	sidence.
Abbott, Samuel A M.D1868Belleville.	
Agnew, AndrewB.A1864Renfrew.	
Agnew, JohnB.A1859 	
" Kingston.	
" ··· ·· ·· ·· M.A. · · · · 1872)	
Alexander, James A M.D1869(Deceased.)	
Alway, Enoch Smithville.	
Anderson, W. J	
Armsfrong, AlfredM.D1866(Deceased.)	
Armstrong, Albert M.D867Arnprior.	
Asselstine, Henry A B.A1876Gananoque	
Aylsworth, Arch. K M.D1863 Newburgh.	
Bain, Hugh U., M.DB.A1871Cornwall.	
Bain, John FB.A1867Winnipeg,	М.
Bain, William B.A 1845)	
Bain, William R B.A 1863	
Ballagh, James H B.A1878 Port Hope.	
Baxter, John CD.D1878Montreal.	
Bayne, James (Deceased.)	
Beattie, WilliamM.D1866Melbourne,	Q.
Beckett, JamesM.D1863Jamaica.	
Beeman, Thos. W M.D878Selby.	
Bell, AlexanderM.D1865Lakefield.	
Bell. Andrew Carillon, Q	
Bell, GeorgeB.A1847Walkerton,	O.
" LL.D1872) warkerton,	٥.
Bell, George Toronto.	
Bell, James M (Deceased.)	
Bell, John B.A1862)	
Bell, John	
" " M.D 1866)	
Bell, Josiah JB.A1864 Peterboro	
", ", ", ",	
Bell, William (Decaased.)	
Bennett, Henry M.D1878Peterboro.	

~ r	Darman	Year of	Duagant vasidanas
Name.		graduation.	Present residence.
Benson, John R	B.A	1853	Gylpie, Queensland.
Bergne, Samuel B	D.D	1858)	London, England.
Bernard, Gerald	M.D		Newcastle-on-Tyne.
Bethune, Alexander	M.D		Wingham.
Bethune, Henry F	M.D		Mount Hope.
Bethune, William	B. A		Toronto.
Betts, Alfred H	M.D		Deceased.
Bice, Mark	M.D		Hampton.
Bigham Hugh	M.D		Fenelon Falls.
Bigham, James	M.D		Warsaw.
Bigham, John	M.D		Cataraqui.
Bird, Francis W	M.D	1859	San Francisco, Cal.
Bird, Nelson J Black, John	D.D		Kildonan, Manitoba.
Black, William A	M.D		(Deceased.)
Blakely, Robert	M.D		(Deceased.)
Bleasdell, Charles E	M.D		(Deceased.)
Bonner, John	B. <b>.</b>	1845)	` '
	M.A	1847)	New York.
Booth, Donald B	<u>M</u> .D	1868	Odessa.
Bourchier, H. P	B.A	1853	Valparaiso, S.A.
Bowen, George H	M.D		Seeley's Bay.
Bowen, Robert	M.D		H. M. Service.
Bowers, Samuel S	M.D		Fond du Lac, Wis.
Boyd, Edward Boyle, Arthur R	LL.B		Cincinnati, U.S.
Boyle, Arthur R Branigan, P. K	M.D		Petrolia. (Deceased.)
Bray, John L	M.D		Chatham, O.
Bridgland, Samuel	M.D		Bracebridge.
Brien, James	M.D		Essex Centre.
Brown, Marshal J	M.D		Kingston.
Buckley, Philip J	LL.B	1863	(Deceased.)
Burgess, James E	B.A	-0/01	Sydenham, O.
"	M.A	10/01	
Caie, George J	B.A	1861	Forfar, Scotland.
Caldwell, William	B.A		Lanark, O.
Cameron, Charles I	B.A	1861	New Edinburgh.
	B.A	• • • • • • • • • • • • • • • • • • • •	
Cameron, Hugh Cameron, James Y	M.A		Carluke, Ont. Williamstown, O.
Cameron, John	B.A		London, O.
Campbell, Alexander	B.A		Manitoba.
Campbell, Donald	B.A		(Deceased.)
Campbell, George	M.D		H. M. Navy.
Campbell, John	B.A	1847)	(Deceased)
	M.A	1050)	(Deceased.)
Campbell, John H	M.D		(Deceased.)
Campbell, Joseph Campbell, Robert	M.D		Bristol, Q.
Campbell, Kobert	В.А	1856)	Montreal.
Campbell Robert	M.A	1867)	
Campbell, Robert	B.A	1867)	Renfrew.
Carscallen, Allen B	M.D		Enterprise.
Case, George H	M.D	1876	
Cattanach, John C	B. A		Dundee.
Caven, William	D.D		Toronto.

		Year of	
Name.	Degree.	graduation.	Present residence.
Chaffey, Ellswood			Lachine.
Chamberlane, Theodore			Morrisburgh.
Chambers, Daniel			
			(Deceased.)
Chambers, Robert	B. A		Whitby.
Chanonhouse, John	M.D		Eganville
Chanonhouse, Thomas	M.D		(Deceased.)
Chapman, Edward J	LL.D.	1867	Toronto.
Chisholm, Harvey F	M.D	1857	(Deceased.)
Chisholm, John	B. A		Alvinston, Ont.
Chrysler, Francis H	B. A	1866	Ottawa.
Clark, James	M.D	1868	Bay City, Mich.
Clarke, John	M.D	1872	Chesterville.
Clarke, William C			Manitoba.
'Claxton, George	B. A		Kingston.
Claxton, William	M.D		Verona.
Clinton, George	M.D		Kingston.
Cluness, William R	B. A	1855	····
	M.A	1850	Sacramento, California
Cogen Joromich P		1859	(Deceased)
Cogan, Jeremiah R	M.D		(Deceased.)
Coleman, William F	M.D		Toronto.
Comer, Alexander T. C.	M.D		Titusville, U.S.
Corbett, George H	M.D	1856	
Corbett, Henry T	M.D	1868	Ottawa.
Cormack, James	B. A	1872	Harrowsmith.
Corry, Robert	M.D	1861	
Craig, James J	B. A	1874	Orangeville.
Craig, Hugh A	M.D		Wellington.
Craig, William	B. A	1858	New York.
Craig, Robert John	B. A	7 (m r )	
	M.A	1874	Mill Point.
Cranstoun, James G	M.D		Arnprior.
	M.D		Durham, O.
Crawford, Joseph			
Crawford, Robert	B. A		Kingston.
Creeggan, John G	B. A		Kingston.
Cumberland, James Cumberland, Thomas D	B. A		Mono Centre.
	B. A		St. Catharines.
Curran, William B	B. A	1859)	Hamilton.
"	M.A		· · · · · · · · · · · · · · · · · · ·
Currie, Archibald	B. A	1858)	Wick O
" "	M.A	1861∫	Wick, O.
Curry, James W	B. A	1878	Port Hope.
Darragh, Robert J	M.D	1866	Glenburnie, O.
David, Alfred	M.D		Port Lambton.
Davis, Ransom A	M.D		Easton's Corners.
Davis, Robert H	M.D		York, Grand River.
Davison, Myers	M.D		Florence.
Dawson, Alexander.:	B. A		Beamsville.
Day, Barnabas W	M.D		Kingston.
Day, H. W	M.D		Trenton.
Day, Jonathan	M.D		Baltimore, O.
Day, Walter D. P. W	M.D		Harrowsmith.
Deans, George	M.D	1865	
Deans, William C	M.D	1861	
Deynard, Adalbert B	M.D	1875	Picton.
Dickson, John R	M.D		Kingston.
	M.D		(Deceased.)
Dickson, John R Dingman, Wiiliam E	M.D		Glenallan.
0		13	

Nama	Dogwoo	Year of	Present residence.
Name.		graduation.	
Dingwall, James  Donald, William	B. A		Cornwall.
Donald, William	<u>D</u> .D		(Deceased.)
Donald, William	B. A		Manitoba.
Douglas, James	B. A		Phenixville, Pa.
Douglas, Robert	В. А	1851)	Port Elgin.
21 11	M.D	1055)	
Dow, John Ball	B. A	1875	Whitby.
Dowsley, David H	M.D	1875.,	
Dowsley, George C	M.D	1875	Frankville.
Drummond, Andrew T	B. A	1860)	Montreal.
11 11	LL.B	1863	Wontrear.
Drummond, Francis A	B.A	1877	Ottawa.
Dugdale, John J	M.D	1867	Montreal.
Dumble, William C	M.D	1870	Owen Sound.
Dumble, William C Dumble, Thomas H	M.D		Belleville.
Dumoulin, John P	M.A		Montreal.
Dunbar, Neil	B.A		(Deceased.)
	M.D		Mount Forest.
Dunbar, Samuel Dunlop, Neil	M.D		Sydenham, O.
Dunn, Andrew T	M.D		North Augusta.
Dupuis, Nathan F	B.A	r866)	
Dupuis, Human 1 ····	M.A	1868	Kingston.
Dupuis, Thomas R	M.D		Kingston.
Dyckman, Henry M	B.A		Orange, N.J.
Eakin, Joseph S	B.A	1866	
	B. A	7862)	
Edmison, Henry	M.A	1863]	Melbourne, Q,
Elmor William W	M.D		
Elmer, William W Elwell, W. D		1858	
Elwell, W. D	M.D		(Deceased.)
Erly, Francis W. J	M.D	1868	(December )
Evans, Henry	M.D		(Deceased.)
Evans, Henry	M.D	1878	rarker.
Evans, Joseph	B. A	1855]	Shoe Heel, N. Carolina.
• • • • • • • • • • • • • • • • • • • •	M.A	1057)	
Fairbairn, Archibald C	M.D		Minneapolis.
Farrell, J. T	M.D		(Deceased.)
Fee, Samuel H	M.D		Kingston.
Fenwick, Kenneth N	В. А	1871)	T71
11 11	M.A		Kingston.
• • • • • • • • • • • • • • • • • • • •	M.D	1874)	
Fenwick, Thomas M	M.D		Kingston.
Ferguson, Charles F	M.D		Kemptville.
Ferguson, Edward G	M.D		Brunswick, Georgia.
Ferguson, George D	B.A		Kingston.
Ferguson, James F	B.A		Napanee.
Ferguson, John	B.A	1876)	Newburgh.
"" _ · ·	M.A	****	
Ferguson Robert B	M.D	1863	
Ferguson, Thomas B	B.A	1863	Kingston.
Ferguson, William B	B.A		Napanee.
File, Albert J	M.D		Ameliasburgh.
Ford, Herbert Douglas.	M.D	1874	Chicago.
Foster, Robert J	M.D	1859	(Deceased.)
Fowler, Fife	M.D		Kingston.
Fox, Edward C Fraleck, Edison B	M.D	1864	
Fraleck, Edison B	B.A		Belleville.
Franklin, Benjamin W	M.D		Port Burwell.

		Year of	
Name.	Degree.	graduation.	Present residence.
Fraser, Alex. G	B.A	1852	(Deceased.)
Fraser, Anson S	M.D	1869	
Fraser, Archibald	B.A		(Deceased.)
Fraser, Donald	B.A	T8641	,
"	M.A	1866	Mount Forest.
Fraser, George L. B	B.A	1870	Ottawa
Fraser, James	B.A		Chatham, Q.
Fraser, John F	B.A		Fenagh Vale.
Fraser, John M	B.A	0 1	Α.
	M.D	1861	London.
T T 1	B.A .:		
Fraser, Joshua		1858	Pandhaad
Fraser, William	D.D		Bondhead.
Fuller William H	B.A	1867)	Kingston.
•• •••	M.A	10/3/	
Gallaher, John	B.A	1878	Pittsburgh.
Geddie, John C	D.D		(Deceased.)
Geikie, John C	:D.D		London, England.
Gerin, John	M.D		Auburn, U.S,
Gibson, Andrew M	M.D	1874	Clinton.
Gibson, William John	B.A	1874	Renfrew.
Gildersleeve James P	LL.B	1863	Kingston.
Giles, John G	M.D	1860	Farmersville.
Gill, Henry	D.D		England.
Gillies, George	B.A		Gananoque.
Gillies Neil	M.D		Chesley, Co. Bruce.
Givens, David A	B.A		Kingston.
Glassford, Thomas S	B.A		Summerstown.
Gleeson, James H	M.D	1864	Syracuse, N.Y.
	B.A	-01	
		1851	Clifton, O.
Cordon John	M.A	1854)	Toronto
Gordon, John	B.A		Toronto.
Grant, James A	B.A		Ottawa.
Grant, Peter Grasse, Sidney D	D.D		Dundee, Scotland.
Grasse, Sidney D	M.D		(Deceased.)
Gray, John	B.A	1874)	Orillia.
	M.A	10/0}	
Gunsolus, Kenneth	M.D	1871	
Hacket, Joseph	M.D	1858	••
Hamilton, Andrew, M.D.	B.A	1855	(Deceased.)
Hamilton, David	M.D	1862	Buffalo, N.Y.
Hamilton, John	B.A	1877	Iroquois.
Harkness Thomas F.	B.A	1862	India.
Harrison, Thomas T. S	M,D	1865	Selkirk.
Hart, Thomas	B.A	T860)	
117	M.A	1868	Winnipeg, M.
Harvey, Albert E	M.D		Watford.
Heath, Fred. C	B.A		Kingston.
Heenan, Daniel	B.A		Deceased.)
Heggie, David	M.D		Brampton.
Henderson Donald	M.D		Winnipeg.
Henderson, Donald Henderson, William	D.D		(Deceased.)
Henderson, William	M.D		(Deceased.)
Hendry, George	M.D		Zilwawkie.
Herald, John	B.A		Dundas.
Herriman, Weston Leroy	M.D		Port Hope.
Higgins, Edward M	M.D		Ottawa.
Higinbotham, William	M.D	1871	Omeme.

		Year of	
Name.	Degree.		Present residence.
Hillier, William	M.D		(Deceased.)
Hillier, Solomon C	M.D	1860	Enniskillen.
Hoare, Walter W	M.D		Strathroy.
Hodge, George	M.D	1870	
	D.D		(Deceased.)
Hogg, John	M.D	1877	A shton
Holmes, F. S. Leroy	B.A	1858)	Ashton.
Hooper, Edmund J	M,A		Napanee.
Ilana Iamaa A		1001)	-
Hope, James A	В.А	1862)	(Deceased.)
	M.A	1005)	
Horsey, Alfred	M.D	1865	
Horsey, Edward H	M.D	1860	
Hourigan, AndrewR	M.D		Peterboro.
Houston, William B	M.D		Chatham, O.
Howell, George W	M.D		Tweed, O.
Howells, Thomas B	M.D		(Deceased.)
Hubbs, Henry A. M	M.D		Bay City, Mich.
Hunter, Alexander	B. A		(Deceased.)
Ingersoll, Isaac F	M.D	1863	
Ireland, Charles F	B.A	1866	Wolfe Island.
Irvine, William H	B.A	1877	Elginburg.
Irwin, Chamberlen A	M.D		Wolfe Island.
Jamieson, Alexander	B.A	1863	Williamstown.
Jardine, Robert Sc. D	B. A	1863)	
" " "	M.A		Calcutta, India.
17 17	B.D	1866)	
Johnson, Absalom H. J	M.D		Brockville.
Johnson, William	B. A	T850)	
	M.A	1852	Barrie, Ont.
Johnstone, David	M.D		Kincardine.
Jones, Henry M	M.D		Marmora.
Jones, John	M.D		Kemptville.
Joy, Sylvanus	M.D		Woodstock.
Kahkewaquonaby	M.D		Haggersville, O.
Kay, William	M.A		Goderich.
Kellock, John D	M.D	1862	
Kelly, David	M.D		(Deceased.)
Kelly, Edward J	M.D	1861	
Kemp, Alexander F	LL.D		Brantford.
Kemp, James A	M.D		Leamington.
Kennedy, Alexander	M.D	1876	
	M.D	1873	Wolland
Kennedy, Jacob B Kennedy, Roderick	M.D	1863	Roth
Kennedy, Wm. B Kertland, Edwin H	M.D		Pembroke.
	M.D	1865	
Kidd, Edward	M.D	1871	
Kidd, Peter E	M.D	1878	
Kincaid, Robert	M.D		Peterboro.
Knight, Archibald P	B.A	1872)	Kingston.
****	M.A	1074)	
Lafferty, James	M.D		Pembroke.
Laidlaw, Alexander R	M.D		(Deceased.)
Lake, Charles B	M.D		Ridgetown.
Lambert, Robert	M.D	1859	
Lane, Joseph W	M.D		Mallorytown.
Lang, William A	B.A	1873)	Lunenburg.
****	M.A	1876∫ '	· · · · · · · · · · · · · · · · · · ·

,		Year of	
Name.	Degree. g	raduation.	Present residence.
Lavell, Charles H	M,D	1873	. Kingston.
Lavell, John R	B.A	1877	
Lavell, Michael	M.D	1863	
Lawlor, Michael	M.D		.(Deceased.)
Leavit, Arvin S	M.D	1869	
Lennox, David	B.A	1861	· · · corport.
Lewis, Frederick	M.D	1878	Napanee
Lindsay, John	B.A	T8=01	
, , , , , , , , , , , , , , , , , , ,	M.A	1854	(Deceased.)
	B.A		. Sherbrooke, Q.
	M.D		
Litchfield, John P			(Deceased.)
Livingston, John	B.A		(Deceased.)
Livingston, Peter S	B.A		.Russeltown, Q.
Lochead, John S	B.A	1861)	Hullett, Ont.
1	M.A	1803)	
Love, Andrew T	B.A		Harvey Station, N.B.
Lunam, Henry	B.A		. Litchfield.
Lynch, Dennis P	M.D		Allumette Island.
Machar, John, M.A	B.A	1857	. Kingston.
Malloch, Archibald E	B.A	1862	Hamilton.
Malloch, Edward G	B.A	1860	Perth.
Malloch, George	B.A	1865	Arnprior.
Malloch, George W	B.A	1850	. Paisley, O.
Mann, Alex., M.A	D.D	1876	. Pakenham.
Mann, James	M.D	1869	Renfrew.
Mann, James Mark, Robert	$\dots M.D.$		Shanville, Q.
Mason, James W	B. A		New Annan, N.S.
Massie, John	M.D		Campbellford.
Masson, Thomas	M.D		Cape Vincent, N.Y.
Mathesson, Murdock	M.D		Arenac, Mich.
Mattice, William D	B.A		(Deceased.)
May, John	B.A	T8=71	· ·
,, joii,	M.A	1861	Ottawa.
Meadows, R.W.,L. R., C.	SEMD		H. M. Service.
Meagher, Daniel	M.D		Montreal.
Mercer, John F	M.D		Goderich.
	M.D	1077	Newburgh.
Miller, Thomas	B.A		Milton, O.
Miller, Thomas	B.A		Flamboro, O.
Milligan, George	B. A	,1862	
Milliner, William S	M. D		Rochester, N.Y.
Minor Silas	M.A		(Deceased.)
Monro, John C	M.D		South Finch.
Moore, Andrew	M.D		Inkerman.
Moore, Vincent H	M.D		Brockville.
Morden, James B	M.D	1865	
Morden, John H	M.D	1859	Brockville.
Mordy, John	B.A	1875)	Pinkerton.
11	M.A	1070)	
Morrison, Duncan	B. A	1862	Owen Sound.
Morrison Duncan	B. A	т866)	Owen Sound.
22 22	M.A	1868)	O well Soulid.
Mostyn, William	M.D	1858	Almonte.
Mowat, John B	B. A	1845)	
,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,,	M.A	1847)	Kingston.
Mowat, Oliver	LL.D.	1872	Toronto.
Muckleston, John S	B. A		Kingston.
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		Year of	
Name.		graduation.	Present residence.
Mudie, John A	B. A		.Kingston.
Mair, Alexander	B. A		Scarborough.
Muir, James	B.A		. Fergus.
Muir, James B	M.A	1865	Huntington, Q.
Muir, James C	D.D		. North Georgetown, Q.
Muir, Peter D	B.A		.(Deceased.)
Mundell, William	B. A		.Kingston.
Munro, David	M.D		.Lanark.
Murphy, John Bernard	M.D		. Belleville.
Murray, Isaac	D.D		. Cavendish, P.E.I.
Macadam, Samuel T	M.D		. Pembroke.
Macalister, John Macarthur, Duncan	B. A		Ashton, .Ailsa Craig.
Macarthur, James	B. A	T875)	_
macartaar, james	M.D	1878	Ailsa Craig.
Macaulay, Evan	B.A		. Mono Mills.
MacCracken, John I	В. А		.Ottawa.
Macdonald, Alexander	B. A	1861	.Duntroon.
Macdonald, Alexander R.	M.D		.Brighton.
Macdonald, Colin	B. A		(Deceased.)
Macdonald, Donald	B. A		London, O.
Macdonald, Duncan	B. A M.A	1859)	Creemore, O.
Macdonald, George	B. A	1863)	
" " conserving	B.Sc	1878	Wellington.
Macdonald, Herbert S	B.A	1850)	D1
	M.A	1861	Brockville.
Macdonald, Sir John A	LL.D.		. Toronto.
Macdonald, Patrick A	B. A		.Toronto.
Macdonnell, Daniel J	B. A	1858) 1860	Toronto.
Macdonnell, George M	B. A		. Kingston.
Macdonnell, John A	M.D		.Prince Arthur's Landing.
Macdonnell, John M	B.A		. Winnipeg, M.
Macgillivray, Malcolm	B.A	т8-та)	Wobuin.
"	M.A	1074)	voburn.
Mackenzie, Archibald A	B.A	1877)	Quaco, N.B.
Washarras John H	B.Sc	10//)	~ ~
Mackerras, John H	B.A	1850)	.Kingston.
Maclean, Matthew W	B.A	T860.)	
	M.A	1872	.Belleville.
Maclennan, Alexander	B.A		.Uxbridge.
Maclennan, Donald	B.A	1848)	
" " " " " " " " " " " " " " " " " " "	M.A	1002)	•
Maclennan, Donald B	B.A	1857	Cornwall.
Maclennan, James	B.A	1861)	.Toronto.
MacLennan, John	B.A	1 -	. Lindsay.
Maclennan, Kenneth	B.A	· 1840)	· ·
	M.A	1868	Charlottetown, P.E.I.
Maclennan, William	B.A	1864)	.(Deceased.)
Vicewillen Duncen	M.A	1000)	`
Macmillan, Duncan	B. A		Ottawa.
Macnab, Finlay F Macnee, Peter C	B. A		. Carleton Place Toronto.
indefice, i etci C	D. A	10/3	· Loronto.

		Year of	
Name.	Degree. g	graduation.	Present residence.
Macpherson, Alexander	M.D		(Deceased.)
Macpherson, Henry	B. A	1851 .	Owen Sound.
Macpherson, James P	B. A	1857)	Ottawa,
	M.A	1865 j	Ottawa,
McBain, Alexander	B. A	1860)	(Deceased)
"	M.A	1862)	(Deceased.)
McBean, Alexander G	B.A	1865 .	Montreal.
McCammon, James	M.D		Kingston.
McCannell, Donald	B.A		Lancaster.
McCaul, James McColl, Evan C. W	B.A . ,	1859 .	Three Rivers, Q.
McColl, Evan C. W	B.A	1866 .	Unionville, O.
McCulloch, Andrew	B.A	1571)	Thorold.
" " …	M.A	1874)	
McCullough. William S	M.D		(Deceased.)
McDowell, Charles	B.A		Glenallen.
McDowell, James A	B.A	/	Sarnia.
McEwen, James	B.A	1852)	London, O.
	M.A	1854)	
McGillivray, Alexander	D.D		(Deceased.)
McGillivray, Daniel	B.A		Brockville.
McGillivray, Farquhar.,.	B.A		Civil Service, Ottawa.
McGillivray, Neil	B.A		Montreal.
McGregor, Peter Colin	B.A		Almonte.
McGregor, P. G	D.D		Halifax, N.S.
McGuire, Thos. H	B.A		Kingston.
McIntyre, Donald M	B.A		Kingston.
McIntyre Duncan	M.D		Wardsville.
McIntyre, John	B.A		(Deceased.)
McIntyre, John	B.A	1861)	Kingston.
• • • • • • •	M.A	1872)	
McKay, Donald G	B.A		(Deceased.)
McKay, William E	B.A		Orangeville, O.
McKee, William	B.A		Clover Hill.
McKellar, Dugald	M.D		(Deceased.)
McKenzie, Andrew	M.D		(Deceased.)
McKenzie, Edward	M.D		Smith's Falls.
McKenzie, John A	B.A		Sarnia.
McKillop, Alexander	B.A		Pembroke.
McKillop, Charles	B.A		Montreal.
McLaren, Alexander	M.D		Shannonville.
McLaren, Ebenezer D	B.A	1870)	Choltonham O
****	M.A		Cheltenham, O.
	B.D	1873)	Nelson
McLaren, James	B.A		Nelson. (Deceased.)
McLaren, John	B.A		(Deceased.)
McLaren, John Brown	В.А	1876)	Kingston.
McLaren, Peter	B.A	1878)	(Deceased.)
** *	B.A		Ormstown, Q.
N.F. Y. Thursday			(Deceased.)
37 7 41	LL.D		
McLean, Caird, R	M.D		Meaford.
	M.A		Arnprior.
McLean, Donald J McLean, Solomon C	M.D	0 -	
McLean, Thomas F	M.D		Goderich.
McLennan, Alexander S.	M.D		Chicago.
McLeod, James A. F	B.A		Fort McLeod, N.W.T.
raciood, James n. r		034	ore medicula, 14. W.1.

Name.	Year of Degree, graduation. Present residence.
McMahon, James	
McMillan, John	B.A1862)Truro, N. S.*
McMarine John	B.D1865)
McMorine, John	D.D1865(Deceased.)
McMorine, John K	$\dots$ B.A. $\dots$ 1859 $\dots$ Thunder Bay.
MaMarina Samual	M.A 1863)
McMorine, Samuel	B.A1865Carp, O.
MaMurahy Arabibald	M.A1872)
McMurchy, Archibald	B.A1875Pembroke.
McNichol, Eugene C	M.D1877Cobourg.
McTavish, Duncan B	B.A1870 M.A1873
McQuarrie, Alex. R	B.A
Neill, Robert	D.D1872Burnbrae,
Neish, James Nelles, Samuel S	
Nesbitt, Edward	
Newton, John	M.D1866Mill Point, O.
Nichol, James	M.D (Deceased.)
Nicholson, Alexander B	B.A1867Lansdowne.
Nimmo, John H	B.A1867Bath, O.
Niven, David P	B.ASutton.
Noel, John V	B.A 1863
Nugent, Andrew	B.A1876 Newburgh.
Oliver, Alfred S	M.D1863Kingston.
Oliver, John K	M.D1868Kingston.
O'Loughlin, Robert S	B.A1865 New York.
O'D-ill - Anth	M.A1874
O'Reilly, Anthony	M,D1861(Deceased.)
O'Sullivan, John	M.D1868Peterborough.
Oxley. M. Stewart	B.A1878Summerstown.
Parker, Robert	M.D1861Stirling.
Patterson, James R Patterson, Gilbert C	M.D1867Tiverton.
	B.A1878South Finch.
Perrault, Julien Phelan, Daniel	M.D1857 San Francisco, CalM.D1877 Kingston.
Pollok, Allan	D.D1876Halifax, N.S. B.A1861Victoria, B.C.
Pope, Stevan D Potter, Levi	M.D1870
Potter, Samuel	M.D1875 Kemptville.
Potter, Thomas	M.D1876Hazeldean.
Preston, Richard	M.D1875Milverton.
Preston, Robert H	M.D1864 Newboro.
Price, Cornelius V	LL.B1863Kingston.
Price, Robinson V	M.D1866Bath.
Pringle, John	B.A1875Quebec.
Purdy, Alvanly N	M.D1873Seeley's Bay.
Purdy, Charles W	M.D1869Chicago.
Ramsay, Robert	M.D1861Orillia.
Reeve, Richard A	M.D1865Toronto.
Reid, William, M.A	D.D1876Toronto.
Reily, Adrian	M.D1862Welland.
Renaud. Allen C	B.A1864Australia.
Ritchie, George	B A 1878)
	B.Sc1878Inverary.
Roche, William P	M.D1860North Gower.
Rockwell, Albert	M.D1868 Hamilton.

Sa.	70	Year of	
Name.	Degree.	graduation.	Present residence.
Rockwell, Ashbel S	M.D		Rochester, N.Y.
Rogers, Robert, V	B.A	1861	Kingston.
Rollo, James	B.A	1852	Toronto.
Romanes, George	LL.D.	1866 .	(Deceased.)
Rose, George R	B.A	1854)	(Decembed)
66	M.D	1860 ) .	(Deceased.)
Ross, Donald	B.A	1860)	
££ ££	M.A	1862 .	Lachine, Q.
66 66	B.D	1863)	~
Ross, James	D.D		Halifax, N.S.
Ross, George S	B.A	1856	
Ross, James	B:A		Holbrook.
Ross, John Reid	B.A	1862	
Ross, Thomas K	M.D		Odessa.
Ross, Walter	B.A	1850)	
	M.A	1862	Carleton Place.
Ross, William A	B.A		Ottawa.
Rourke, Francis	M.D		Montreal.
Rowse, Mark	B.A		Bath, O.
Ruttan, Joseph B	M.D		Picton.
Rutherford, James	M.D		Orono.
Saunders, Herbert J	M.D		Mill Point.
Saunders, Laurence	M.D		(Deceased.
Sayers, Alexander	M.D		
co	B.A		Cherry Valley, Picton. Kingston.
Scales, Thomas Scott, Alexander H	B.A		Kingston.
	M.A	$\frac{1875}{1878}$ .	Owen Sound.
Scott, William S			Couthampton
	M.D	1855 .	Southampton.
Scovill, Simmons S	M.D		North Gower.
Sedgewick, Robert	D.D		Musquodoboit, N.S.
Searls, Abram W	M.D		(Deceased.)
Shannon, Lewis W	B.A		Kingston.
Shannon, Robert W	B.A		Kingston.
Shaw, Robert	B.A		Kingston.
Shier, James	B.A	1863	777 · C 1
Shirley, Joseph W	M.D		Watford.
Sieveright, James Sievewright, James A	B.A		Goderich.
	M.D	_ ′.	Florence.
Simpson, James	B.A		YY!
Skinner, Henry	M.D		Kingston.
Smith, George	M.D		(Deceased.)
Smith, James C	B.A	1861	Guelph.
	M.A	1803 )	*
Smith, John R	M.D		Harrowsmith.
Sommerville, James A	B.A	1859	Mooretown.
	M.D	1000	
Spafford, H. W	M.D		(Deceased.)
Sparham, George S	M.D		North Augusta.
Spear, Hugh	M.D		Leaksdale.
Spence, Alexander	D.D		Elgin, Scotland.
Spencer, Henry	M.D		
Spooner, George D	M.D		(Deceased.)
Spooner, Hiram R	M.D		Sutton, Co. York.
Sproat, Alexander	B.A	1853 .	Walkerton.
Squire, William W	B.A	1854)	(Deceased)
	M.A	1864)	(Deceased.)
Stewart, Alexander J	, M.D	1869 .	Angus, O.
,			

No. 1	Year of
Name. Degree	
Stowell, Olmsby O M.D.	
Strange, John B.A. Stuart, James G B.A.	
Stuart, Irwin B.A. Sullivan, Michael M.D.	
Sullivan, Thomas M.D. Sullivan, William B.A.	
Sutherland, Robert B.A	
Sweetland, John M.D	
Switzer, Wilson J M.D.	1862 (Deceased.)
Tarbell, Horace S B,A	1862
Tassie, WilliamLL.I	
Taylor, James M.D.	
Taylor, William F M.D.	1861 Australia.
Thibodo, Augustus J., M.DB.A	· · · · · · · · · · · · · · · · · · ·
" " M.A	1054)
Thibodo, OliverM.D	
Thibodo, Robert M.D.	
Thibodo, William BB.A	
3.5.4	
Thirkell, William G M.A	
Thompson, John R B.A	186=)
" " M.A	
Thomson, George B.A	
Thomson, George M B.A	
Thomson, JohnB.A Thornton, Thomas HM.D	
Thornton, William MM.D	
Tracey, Robert M.D	1862Belleville.
Tracey, Thomas BM.D	
Trousdale, James D M.D.	
Tuttle, Leslie M.D.	
Ure, Robert D.D.	
Valleau, George Z M.D.	
Van Allen, John RM.D	
Vanvlack, Gilbert J M.D.	and the same of th
Wafer, Francis M M.D.	
Walbridge, Asa F B.A Walkem, William W M.D	
Walker, Allen H M.D.	
Wallace, AlexanderB.A	
Wardrope, Thomas D.D	
Wartman, Philander CM.D	
Watson, Andrew B.A	
Watson, Charles VM.I	
Watson, David B.A	1850)
"M.A	
Watson, Donald B.A	1851(Deceased.)
Watson, Peter.: B.A	
Webster, James B.A	
Webster, George R B.A. Weekes, William J M.D.	
Weekes, William JM.D	
Weir, WilliamM.D	
White, Joseph FB.A	
Willis, Michael D.D LL.	
Wilson, Charles J. C M.D.	1869 Str. Galacia, Pacific Line.

Wilson, John A	M.D	1863	Cannington, O.
Wilson, Thomas	B.A	1877	Glencoe.
Wylie, James	B.A	1864	Hamilton.
Yates, Horatio	M.D	1863	Kingston. *
Yates, Octavius	M.D	1856	(Deceased.)
Yeomans, George A	B.A	1863	Dunville.
Yeomans, Horace P	B.A	1860)	Mount Forest.
14 14	M.D	1863	wrount Polest.
Young, David	M.D	1871	Manitoba.
Young, Daniel	M.D	1862	Conway.
Yourex, John McGill	M.D	1876	Warsaw.

# FELLOWS of ROYAL COLLEGE PHYSICIANS and SURGEONS,

### KINGSTON.

Bethune, Alexander	 	1874	Wingham.
Cluness, Wm. B	 	1871	Sacramento, Cal.
Dickson, John R	 	1866	Kingston.
Dupuis, Thomas R	 	1871	Kingston.
Fowler, Fife	 	1866	Kingston.
Kennedy, Roderick	 	1866	Bath.
Lavell, Michael	 	1866	Kingston.
Mark, Robert	 	1878	Shawville, Q.
Neish, James	 	1871	Linstead, Jamaica.
Oliver, Alfred S.	 	1871	Kingston.
Reeve, Richard A.	 	1866	Toronto.
Saunders, Herbert J.	 	1871	Mill Point.
Sullivan, Michael	 	1866	Kingston.
Yates, Horatio	 	1871	Kingston.
Yates, Octavius	 	1871	(Deceased.)
		,	,

# LICENTIATES OF R. C. P. S., K.

		1872	Belleville.
		1869	(Deceased.)
		1869	Smithville.
		1869	Hampton.
		1867	Fenelon Falls.
		1868	Warsaw.
		1868	Odessa.
		1868	Welland.
		1870	Lachine.
e F		1871	Morrisburg.
		1868	Belleville.
		1873	Ohio, U. S.
		_,, _	St. Johns, N. B.
		1868	Ottawa.
		1872	Farmersville.
			Florence.
			Kingston.
		1868	(Deceased.)
		1867	Montreal.
		1868	
		1869	Ameliasburgh.
		1867	Brockville,
	e F	e F	

Graham, Wm. John			1873	Bothwell.
Gunsolus, Kenneth	3		1874	
Hall, John D.			1878	Brockville.
Hendry George			1869	Zilwaukie.
Herriman, Weston Leroy			1869	Port Hope.
Higginbotham, A.			1868	Bridgewater.
Horsey, Edward H.			1871	Chicago.
Houston, Wm. R.			1871	Chatham.
Hutcheson, John			1869	Fordich.
Johnstone, David			1868	Kincardine.
Kidd, Edward			1871	Manotick.
Lavell, Charles H.			1873	Kingston.
Mark, Robert			1867	Shawville, Q.
Meadows, R. W.		• •	1862	H. M. Service.
Meagher, Augustus	• •	• •	1869	(Deceased.)
Munro, David	••	• •	1867	Lanark.
Murphy, H. J.	••	• •	1867	Chatham.
Maclean, Donald	••	• •	1868	Ann Arbor, Mich.
	s		1873	Chicago.
Nesbitt, Edward	٠.,		1868	Sandwich.
		• •		
Newell, James	• •	• •	1869	Springfield,
Noel, J. V.	• •	• •	1867	TZi-manto-
Oliver, John K.	• •	• •	1868	Kingston.
O'Sullivan, John	• •	• •	1868	Peterboro.
Patterson, James R.	• •	• •	1869	Tiverton.
Price, Robinson B.	• •	• •	1871	Bath.
Purdy, Charles W.		• •	1869	Chicago.
Rourke, Francis	• •	• •	1867	Montreal.
Spear, Hugh	• •	• •	1868	Leaskvale.
Stewart, Alexander J.			1869	Angus.
Thibodo, Robert			1868	Chicago.
Van Allen, John R.	• •		1870	Chatham.
Wafer, Francis W.			1867	(Deceased.)
Young, David			1871	Manitoba.

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# EXAMINATION PAPERS.

# SESSION 1877-78.

# FACULTY OF ARTS.

#### PASS PAPERS.

### JUNIOR LATIN.

Translate: Virgil, Æneid, Book XII., vv. 81—100.

Haec ubi dicta dedit, rapidusque in tecta recessit, Poscit equos, gaudetque tuens ante ora frementes, Pilumno quos ipsa decus dedit Orithyia; Qui candore nives anteirent, cursibus auras. Circumstant properi aurigae, manibusque lacessunt 85 Pectora plausa cavis, et colla comantia pectunt. Ipse dehinc, auro squalentem alboque orichalco, Circumdat loricam humeris; simul aptat habendo Ensemque, clipeumque, et rubrae cornua cristae; Ensem, quem Dauno ignipotens deus ipse parenti 90 Fecerat, et Stygia candentem tinxerat unda. Exin, quae mediis, ingenti adnixa columnae, Aedibus adstabat, validam vi corripit hastam, Actoris Aurunci spolium; quassatque trementem, Vociferans: Nunc, o nunquam frustrata vocatus 95 Hasta meos! nunc tempus adest; te maximus Actor, Te Turni nunc dextra gerit : da sternere corpus, Loricamque manu valida lacerare revolsam Semiviri Phrygis, et fóedare in pulvere crines, Vibratos calido ferro, myrrhaque madentes. 100

- 1. Parse poscit, tuens, anteirent, lacessunt, plausa, comantia, pectunt, squalentem, tinxerat, annixa, corripit, vociferans, sternere, revulsam, madentes.
- 2. Derive ubi, posco, Orithyia, auriga, lacesso, crista, annixa, aedes.

- 3. Account for the following cases, viz.: decus, manibus, humeris, habendo, ensem (vv. 90), aedibus, vocatus, te (vv. 96), ferro.
- 4. Account for the following moods, viz.: dedit, anteirent, sternere.
- 5. Account for the following tenses, viz.: poscit, fecerat, astabat.
- 6. Ignipotens deus ipse—Stygia unda—semiviri Phrygis. Explain these allusions.
- 7. Orithyia. What was the legend regarding her? Interpret it.
- 8. Scan and defend vv. 83, 84.
- 9. Contrast the characters of Æneas and Turnus.
- 10. What is the most interesting feature of the 12th Book?
- II. Dedit, fecit, tinxit, laceravit. Account for these different forms of the perfect tense.
- 12. What was the nature of the laws proposed by the Gracchi?
- 13. What led to the Social War?
- 14. What constituted the chief privileges and responsibilities of a Roman citizen?

#### SECOND PAPER.

# Translate—Horace, Odes III., 14.

Herculis ritu modo dictus, o Plebs! Morte venalem petiisse laurum, Caesar Hispana repetit Penates Victor ab ora.

Unico gaudens mulier marito Prodeat, justis operata sacris; Et soror clari ducis, et decorae Supplice vitta.

Virginum matres, juvenumque nuper Sospitum. Vos o pueri, et puellae Jam virum expertæ, male ominatis Parcite verbis.

Hic dies vere mihi festus atras Eximet curas ; ego nec tumultum, Nec mori per vim metuam, tenente . Caesare terras. I, pete unguentum, puer, et coronas, Et cadum Marsi memorem duelli, Spartacum si qua potuit vagantem Fallere testa.

Dic et argutae properet Neaerae Myrrheum nodo cohibere crinem : Si per invisum mora janitorem Fiet, abito.

Lenit albescens animos capillus Litium et rixae cupidos protervae : Non ego hoc ferrem, calidus juventa, Consule Planco,

- 1. Parse petiisse, gaudens, prodeat, operata, expertæ, ominatis parcite, metuam, fallere, ferrem.
- 2. Derive venalem, Penates, unico, vitta, nuper, sospitum, curas, tumultum, potuit, argutæ, crinem, protervæ, calidus.
- 3. Greek words related to Hercules, dico; plebs, ab, gaudeo, sacer, puer, vim, cadus, fallo, si, rixa, fero.
- 4. Distinguish between unicus, alius, alter—ater, niger—eximo, adimo, demo—tumultus, bellum—metuo, timeo, vereor—fallo, decipio—animus, mens, anima.
- 5. Mention all the Neuter Passive Verbs.
- 6. To what is *unico* equivalent? *Operata* poetically used for what?
- 7. What other verbs form their Imper. Pres. like dic? What compound of eo is regular? Conjugate it.
- 8. Explain the subjunctives prodeat, properet? Construction rules for morte, marito, consule Planco.
- 9. Anything noteworthy in regard to ritu, duelli, laurum, vim. Resolve tenente Caesare terras into a Protasis, metuam being Apodosis.
- 10. Soror, mulier. Give names?
- 11. Of what material was the fillet? How borne?
- 12. To what does *hoc* refer? For what tense is *ferrem* used. It is apodosis with suppressed protasis. Supply protasis. State whether *fact*, *probability* or *impossibility* is implied.
- 13. Pete unguentum, &c. What practice alluded to here.
- 14. What is understood with qua? What objection to qua nom. for aliqua.

- 15. Date of Marsian or Social War? Who was Spartacus? Date of Servile War.
- 16. When was Plancus Consul? How old would Horace be at that time? Date of this Ode?
- 17. When did Consular Government originate? How many Consuls held office at once? How long their term of office? How did the Romans reckon the years?
- 18. What is the subject of this Ode? Against whom was the expedition made? What is the allusion to Hercules?
- 19. When was Horace born? His birth place? To what Philosophical sect did he belong?
- 20. What metre? Scan first stanza?

## JUNIOR GREEK

Translate: Homer, Iliad, Bk. VI. vv. 318-331.

ἔνθ' "Εκτωρ εἰσῆλθε διίφιλος, ἐν δ' ἄρα χειρὶ ἔγγος ἔχ' ἑνδεκάπηχυ· πάροιθε δὲ λάμπετο δουρὸς αἰχμὴ χαλκείη, περὶ δὲ χινόσεος θέε πόρκης. τὸν δ' εὐρ' ἐν θαλάμω περικαλλέα τεύχε' ἔποντα, ἀσπίδα καὶ θώρηκα καὶ ἀγκύλα τός ἀφόωντα: 'Αργείη δ' 'Ελένη μετ' ἄρα δμωῆσι γυναιξὶν ἤστο, καὶ ἀμφιπόλοισι περικλυτὰ ἔργα κέλευεν. τὸν δ' "Εκτωρ νείκεσσεν ἰδών αἰσχροῖς ἐπέεσσιν· ''δαιμόνι', οὐ μὲν καλὰ χόλον τόνδ' ἔνθεο θυμῷ. λαοὶ μὲν φθινύθουσι περὶ πτόλιν αἰπ'ν τε τεῖγος μαρνάμενοι· σέο δ' είνεκ ἀϋτή τε πτόλεμός τε ἄστυ τόδ ἀμφιδέδηε· σ'υ δ' ἄν μαχέσαιο καὶ ἄλλω, ὅντινά που μεθιέντα ἴδοις στυγεροῦ πολέμοιο· ἀλλὶ ἄνα, μὴ τάχα ἄστυ πυρὸς δηΐοιο θέρηται.''

- Parse ἔχε, δουρός, θέε, εὐρε, ἔποντα, άφόωντα, ἤστο, ἔνθεο, μαρνάμενοι, ὰμφιδέδηε, μαχέσαιο, μεθιέντα, ἄνα, θέρηται.
- 2. Derive δείφελος, άρα, ένδεκάπηχο, αμφίπολος, λαοί.
- 3. Give the archaic form of έν, "Εκτωρ, ιδών, ἄστυ, ἄλλφ, δηίοιο.
- 4. Account for the following cases, viz.: δουρός, καλά, πολέμοιο, πυρός.

- 5. Distinguish between  $\check{a}\rho a$ ,  $\grave{a}\rho \acute{a}$ ,  $\check{a}\rho a \pi \varepsilon \rho \acute{i}$  and  $\grave{a}\mu \varphi \acute{i} \grave{a}\sigma \pi \acute{i}\varsigma$  and  $\sigma \varkappa \acute{\nu}\tau o\varsigma \check{a}\sigma \tau \upsilon$  and  $\pi \acute{o}\grave{k}\iota\varsigma \chi \acute{o}\grave{k}o\varsigma$  and  $\varkappa \acute{o}\tau o\varsigma$ .
- 6. Account for the following tenses, viz.: λάμπετο, εὐρε, φθινύθουσι.
- 7. μεθιέντα. Why in the Participle?
- 8. λάμπετο—κέλευεν. Account for the rejection of the Augment in these cases.
- 9. Scan and defend vv. 330.
- 10. How did ladies of the heroic age occupy their time?
- 11.  $\pi \nu \rho \dot{o} \varsigma$ . Decline the singular and plural of this noun.
- 12. State some of the views as to the authorship of the Homeric Poems.
- 13. Trace είην and sim up to a common form and decline the original.

Translate: Lucian, Timon, p. 84a—84d.

ΖΕΥΣ. Τις οὐτός ἐστιν, ὡ 'Ερμῆ, ὁ κεκραγὼς ἐκ τῆς 'Αττικῆς παρὰ τὸν 'Υμηττὸν ἐν τῆ ὁπωρείμ; πιναρὸς ὅλος, καὶ αὐχμῶν, καὶ ὑποδίφθερος. σκάπτει δὲ οἶμαι ἐπικεκυφώς 'λάλος ἄνθρωπος, καὶ θρασύς. ἢπου φιλόσοφός ἐστιν' οὐ γὰρ ἀν οὕτως ἀσεβεῖς τοὺς λόγους διεξῆει καθ' ἡμῶν. ΕΡΜ. Τὶ φὴς, ὡ πάτερ; ἀγνοεῖς Τίμωνα τὸν 'Εγεκρατίδου, τὸν Κολυττέα; οὐτός ἐστιν ὁ πολλάκις ἡμᾶς καθ' ἱερῶν τελείων ἑστιάσας, ὁ νεὁπλουτος, ὁ τὰς διας ἑκατόμβας παρ' ψ λαμπρῶς εἰώθαμεν ἑορτάζειν τὰ Διάσια. ΖΕΥΣ. Θεῦ τῆς ὰλλαγῆς 'ὁ καλὸς ἐκεῖνος, ὁ πλούσιος, περὶ δν οἱ τοσοῦτοι φίλοι; τὶ παθὼν οὖν τοιοῦτὸς ἐστιν; αὐχμηρὸς, ἄθλιος, καὶ σκαπανεύς, καὶ μισθωτὸς, ὡς ἔοικεν, οῦτω βαρείαν καταφέρων τὴν δίκελλαν. ΕΡΜ. Οὐτωσὶ μὲν εἰπεῖν, χρηστότης ἐπέτριψεν αὐτὸν, καὶ φιλανθρωπία, καὶ ὁ πρὸς τοὺς δεομένους ἄπαντας οἶκτος. ὡς δὲ ἀληθεῖ λόγψ, ἄνοια, καὶ εὐήθεια, καὶ ἀκρισία περὶ τοὺς φίλους' δς οὐ συνίει κόραξι καὶ λύκοις χαριζόμενος'

- Parse κεκραγώς, οἶμαι, διεξήει, φής, εἰώθαμεν, παθών, εἰπεῖν, συνίει.
- 2. Derive δπωρεία, δποδίφθερος, έχατόμβας, δίχελλαν, φιλανθωπία, αληθεί.
- 3. Distinguish οὖτος, ἐχεῖνος, ὁ αὐτός—ἐχ and παρά cum geni-

tivo— $\hat{\epsilon}$ χ,  $\hat{\epsilon}$ ις,  $\hat{\epsilon}$ ν— $\hat{a}$ νήρ,  $\hat{a}$ νθρωπος—τοιοῦτος, τοσοῦτος. Illustrate where possible with Latin words.

- 4. Explain contractions in Ερμή, φής, συνίει.
- 5. Supply what is understood with  $τ\tilde{\eta}\varsigma$  '  $Λττιχ\tilde{\eta}\varsigma$ — $\acute{o}$   $τ \grave{u}\varsigma$  . . .  $\dot{k}$  εχατόμβας— $\dot{ω}\varsigma$  . . .  $\dot{k}$  δ $\gamma ω$ .
- 6. What is the force of  $\tilde{\eta}\pi ov o\tilde{\iota}\mu\alpha\iota \tau i \pi \alpha\vartheta\dot{\omega}\nu$ .
- 7. To what is  $\partial \lambda \eta \partial \epsilon \tilde{\iota} \lambda \delta \gamma \varphi$  opposed?
- 8. Who was Hermes and what were his functions? Where Hymettus? What τὰ Διάσια?
- 9. οὐ γὰρ ἄν κ.τ.λ. What does ἄν always imply? What its position? Mention the final conjunctions.
- 10. Rules for consecution of Tenses and Moods.
- 11. Mention the different forms of the Hypothetical Sentence.
- 12. How did Later Greek differ from the Classical Period in use of Optative, Particles, Dual and Prepositions? What tendency in the growth of Language is illustrated?
- 13. A short account of Lucian.

#### SENIOR LATIN.

# Translate: Tacitus, Agricola, cap. III.

Nunc demum redit animus: et quanquam, primo statim beatissimi sæculi ortu, Nerva Cæsar res olim dissociabiles miscuerit, principatum ac libertatem; augeatque quotidie felicitatem imperii Nerva Trajanus, nec spem modo ac votum securitas publica, sed ipsius voti fiduciam ac robur adsumpserit: natura tamen infirmitatis humanæ, tardiora sunt reme lia, quam mala; et ut corpora lente augescunt, cito exstinguuntur, sic ingenia studiaque oppresseris facilius, quam revocaveris. Subit quippe etiam ipsius inertiæ dulcedo: et invisa primo desidia, postremo amatur. Quid si, per quindecim annos, grande mortalis ævi spatium, multi fortuitis casibus, promptissimus quisque sævitia Principis interciderunt? Pauci, et, ut ita dixerim, non modo aliorum, sed etiam nostri superstites sumus; exemptis e media vita tot annis, quibus juvenes ad senectutem, senes prope ad ipsos exactæ ætatis terminos per silentium venimus: non tamen pigebit, vel incondita ac rudi voce, memoriam prioris servitutis, ac testimonium præsentium bonorum composuisse. Hic interim liber honori Agricolæ, soceri mei, destinatus, professione pietatis aut laudatus erit, aut excusatus.

- I. Parse miscuerit, robur, augiescunt, subit, invisa, interciderunt, nostri, exactæ, venimus, pigebit, bonorum.
- 2. Derive securitas, casus, intercido, non, ætas, terminus, vel, liber.

- 3. Give the archaic form of publica, assumpserit, multus, bonorum.
- 4. Give Greek correspondents as regards Root of nunc, misceo, augeo, aevum, dico, venio, vox, socer.
- 5. What figures of Syntax in these expressions: nec spem ac votum sed voti fiduciam assumpserit—voti fiduciam ac robur.
- 6. Explain the following constructions, viz.: pauci ... nostri superstites sumus—quibus juvenes ... venimus—honori A gricolæ destinatus.
- 7. Nerva Caesar—Nerva Trajanus. Account for these names.
- 8. Res olim dissociabiles, principatum ac libertatem—per quindecim annos—memoriam prioris servitutis ac testimonium presentium bonorum composuisse. In the above to what is allusion made?
- 9. Pietas. State its meaning fully. To what English word does it correspond?
- 10. When was this biography written?
- II. Write a short account of the early life of Agricola.
- 12. Specify some of the Grecisms to which Tacitus is partial.

Translate: Virgil, Georgics, Book I., vv. 204-230.

Praeterea, tam sunt Arcturi sidera nobis, Haedorumque dies servandi, et lucidus Auguis, Quam quibus in patriam ventosa per aequora vectis Pontus et ostriferi fauces tentantur Abydi. Libra die somnique pares ubi fecerit horas, Et medium luci atque umbris jam dividit orbem, Exercete viri tauros; serite hordea campis Usque snb extremum brumae intractabilis imbrem. Nec non et lini segetem, et Cereale papaver, Tempus humo tegere, et jamdudum incumbere aratris Dum sicca tellure licet, dum nubila pendent. Vere fabis satio; tum te quoqe, Medica, putres Accipiunt sulci, et milio venit annua cura; Candidus auratis aperit quum cornibus annum Taurus, et adverso cedens Canis occidit astro. At, si triticeam in messem robustaque farra Exercebis humum, solisque instabis aristis; Ante tibi Eoae Atlantides abscondantur, Gnosiaque ardentis decedat stella Coronae, Debita quam sulcis committas semina, quamque Invitae properes anni spem credere terrae. Multi ante occasum Maiae coepere : sed illos

Exspectata seges vanis elusit aristis. Si vero viciamque seres, vilemque phaselum, Nec Pelusiacae curam adspernabere lentis; Haud obscura cadens mittet tibi signa Bootes; Incipe, et ad medias sementem extende pruinas.

- 1. Parse fauces, die, dividit, serite, pendent, occidit, instabis, abscondantur, elusit, sementem, extende.
- 2. Give the etymology of sidus, servo, ostrifer, tento, bruma, ver, sulcus, annus, invitus, messis, credo.
- 3. Explain the following constructions, viz.: nobis servandi—extremum brumae—tempus tegere—vere fabis satio.
- 4. Distinguish between stella and sidus—albus and candidus—propero and festino—aspernor, despicio and contemno.
- 5. Explain the following allusions, viz.: ostriferi fauces Abydi—Cereale papaver—Medica (herba)—adverso astro—Eoae Atlantides—Gnosia ardentis stella Coronae—invitae terrac—ante occasum Maiae—vilem phaselum—Pelusiacae lentis.
- 6. Candidus auratis aperit quum cornibus annum Taurus. To what period of the year does this refer? Give reasons.
- 7. What was the extent of the torrid, temperate and frigid zones according to ancient geographers, (1) before the time of Posidonius, and (2) after his time?
- 8. Parse "Georgicon Liber."
- 9. Scan and defend the following lines. If any anomalies therein, explain them.

Ante tibi Eoae Atlantides abscondantur. Ter sunt conati imponere Pelio Ossam. Glauco et Panopeae et Inoo Melicertae.

## SENIOR GREEK.

Translate: Plato, Apologia, cap. XXX.

 δις ἐγώ φημι. πλείους ἔσονται δμάς οἱ ἐλέγγοντες, οθς νὄν ἐγὼ κατεῖγον, δμεῖς δὲ οὐκ ἢσθάνεσθε καὶ γαλεπώτεροι ἔσονται ὅσφ νεώτεροὶ εἰσι, καὶ δμεῖς μὰλλον ὰγανακτήσετε εἰ γὰρ οἴεσθε ἀποκτείνοντες ὰνθρώπους ἐπισγήσειν τοὺ ἀνειδίζειν τινὰ ὁμῖν, ὅτι οὐκ ὀρθῶς ζῆτε, οὐκ ὀρθῶς διανοεῖσθε οὐ γάρ ἐσθ αθτη ἢ ἀπαλλαγὴ οὔτε πάνο δυνατὴ οὔτε καλή, ἀλλ ἐκείνη καὶ καλλίστη καὶ ράστη, μὴ τοὺς ἄλλους κολούειν, ἀλλ ἑαυτὸν παρασκευάζειν, ὅπως ἔσται ὡς βέλτιστος. Ταὐτα μὲν οὖν ὑμῖν τοῖς καταψηφισαμένοις μαντευσάμενος ἀπαλλάττομαι.

- Parse: ἀποθανεῖσθαι, ἀπεκτόνατε, ἤξειν, εἴργασθε, διδόναι, ἀποβήσεται, πλείους, ἢσθάνεσθε.
- 2. Distinguish: ἦχω, οἔχομω, ἔργομω—usage of οἴομω, οἰμω—
  μέλλω ἀποθωνεῖσθω and ἀποθωνοῦμω. Here use forms of morior to bring out difference.
- 3. Why are μέλλω and οἴομω usually followed by fut. ind.
- 4. τοῦ διδόναι, τοῦ ὀνειδίζειν. Why gen.? Change construction by using ωστε and negative.
- 5. State difference of meaning between Pres., Imperfect, Aorist and Perf. in Greek. Illustrate from text.
- 6. zaì  $\gamma d\rho = \hat{\epsilon} \nu \ \tilde{\phi}$ . Supply ellipses. Give corelative of  $\delta \sigma \phi$ . Render all by equivalent Latin terms.
- 7. ἐν φ μαλιστα, κ.τ.λ. What allusion here? What distinguished Romans held the same view? Instance a case of prediction from Æneid and Iliad respectively. Quote also an English poet on this notion.
- 8. ὅτι. With what moods used? ὅταν. Under what general principle is it always joined to subj.? Which is used, μή or οὐ, with single words and infinitives?
- καταψηφισάμενοι μου—οῖαν ἐμέ κ.τ.λ. Explain construction. Give rule for use of subj. and opt. in Greek. Why is ὅπως used here with fut. ind. and not with the proper mood of a final particle.
- 10. Mention apodosis of εὶ γὰρ οἴεσθε and state what Hypothetical Form. Translate into Greek
  - i. Si quid habet, dat.
  - ii. Si quid habeat, dabit.
  - iii. Si quid habeat. det.
  - iv. Si quid haberet, daret. Si quid habuisset, dedisset.

- 11. Into what literary form are Plato's writings cast. Mention exceptions.
- 12. Mention the accusers and indictment of Socrates.
- 13. Name the Lawgivers of Sparta and Athens. Describe Constitutions of Sparta and of Athens.

Translate: Eurip. Alcestis, vv. 435-462.

ῶ Πελίου θύγατερ,.....στρ. α γαίρουσά μοι είν Αίδα δόμοισι τον ανάλιον οίχον οίχετεύοις. ίστω δ' Λίδας ο μελαγγαίτας θεός, δς τ' ἐπὶ χώπα πηδαλίω τε γέρων νεχροπομπός ίζει, πολύ δή πολύ δή γυναϊκ αρίσταν λίμναν 'Αγεροντίαν πορεύσας έλάτη διχωπφ. γέλυν έν τ' αλύροις κλέοντες υμνοις, Σπάρτα χυχλάς άνίχα Καρνείου περινίσσεται ώρα μηνὸς δειρομένας παννύγου σελάνας, λιπαραϊσί τ' εν δλβίαις 'Αθάναις. τοίαν έλιπες θανούσα μολπάν μελέων αοιδοίς. εἴθ' ἐπ' ἐμοὶ μέν εἴη......στρ. β. δυναίμαν δέ σε πέμψαι φάος έξ λίδα τεμέμνων Κωχυτού τε ρεέθρων ποταμία νερτέρα τε κώπα. σὸ γὰρ, ὦ μόνα, ὧ φίλα γυναικῶν, σύ του αύτας šτλας πόςιν αντί σας αμείψαι ψυγας έξ "Acoa.

- Parse γαίρουσα, `Λίδα, ἴστω, ἴζει, κλέοντες, κυκλάς, ἀειρομένας, ἔλιπες, δυναίμαν, πέμψαι, ἔτλας, ἀμεῖψαι.
- 2. Give the etymology of ἀνάλιος, μελαγγαίτας, πηδάλιον, νεκροπομπός, λίμνη, ἐλάτα, δίκωπος, μουσοπόλος, ἐπτάτονος, ὄρειος, πάννυχος, σελήνη, λιπαρός, νέρτερος, μόνος.
- 3. Distinguish between  $\gamma u i \rho \omega$  and  $\gamma \gamma \theta \dot{\epsilon} \omega \beta i \sigma \zeta$  and  $\beta i \dot{\sigma} \zeta \theta \dot{\epsilon} u$  and  $\theta \dot{\epsilon} \dot{\alpha} z \rho \dot{\alpha} \tau \sigma \zeta$  and  $z \rho a \tau \dot{\sigma} \zeta \tau \dot{\sigma} \sigma v$  and  $z \sigma \sigma \dot{\nu} z \tilde{\gamma} \rho$  and  $z \dot{\gamma} \rho$ .

- 4. μοι, οἶχον, λίμναν, πολλά, φάος, γυναιχῶν. Explain the Government of these.
- 5. οἰχετεύοις. Why in the Optative?
- 6. πορεύσας. Why in the participle? Of what is it predicated?
- 7.  $\partial \dot{\gamma}$ . What is its force?
- 8. εἴθε with the Optative. What is its force? What is the apodosis?
- 9. έπτάτονον χέλον. Explain the allusion.
- 10. Καρνείου μηνός. What month? What festival was held during its course? For how many days? In honour of whom?
- II. What were the names of the Attic months?
- 12. How did they express the 6th, 15th and 24th days of a month?
- 13. Point out the Doricisms in this passage.
- 14. Name the principal Grecian games. Where respectively celebrated? How often? What was the nature of the contests? What were the rewards?
- 15. What are the beauties of this tragedy?
- 16. What is your opinion of the character of Alcestis? of Admetus?
- 17. What is the object of the Chorus in this Ode?

# JUNIOR MATHEMATICS.

- I. Define similar rectilinear figures; duplicate and subduplicate ratio; a dihedral angle; a prism.
- 2. Find a mean proportional to two given straight lines.
- 3. If four straight lines be proportionals the rectangle contained by the extremes is equal to the rectangle contained by the means.
- 4. If two straight lines be parallel, and one of them be at right

angles to a plane, the other shall also be at right angles to the same plane.

- 5. Similar polygons inscribed in circles are as the squares of their diameters.
- 6. If a line be drawn from the vertex of an isosceles triangle to meet the base, or the base produced, the difference of the squares of that line, and of one of the equal sides of the triangle, is equal-to the rectangle under the segments of the base. Apply this proposition to prove the 35th of the 3rd Book.
- 7. Divide harmonically a given finite straight line.
- 8. If the perpendicular B D in a right angled triangle divide the hypothenuse in medial section, the lesser side is equal to the alternate segment A D, and the three sides of such a right angled triangle are in continued proportion.

### SECOND PAPER.

- I. Define a real; a rational; an irrational quantity, and give examples of each.
- 2. Simplify the surds  $4^{3}1/81$ ; 1/432+41/256.
- 3. Prove the rule for finding the greatest common measure of a and b.
- 4. Prove that in the quadratic equation  $x^2 + px q = 0$  the sum of the roots is equal to the coefficient of the second term with the sign changed, and the third term is equal to the product of the roots.
- 5. Solve the Equations

$$\frac{48}{x^{2}} + \frac{3^{2}}{x} = 1$$

$$x - 2y = 2$$

$$3xy = 36$$

$$xy = 18 (x - y)$$

$$x^{2} + y^{2} = 117$$

$$(1 + x)^{\frac{1}{3}} + (1 - x)^{\frac{1}{3}} = 2^{\frac{1}{3}}$$

6. An alloy of copper and tin containing 100 cubic inches weighs 505 oz., how many oz., of each metal does it con-

- tain, supposing a cubic inch of copper to weigh  $5\frac{1}{4}$  oz., and a cubic inch of tin  $4\frac{1}{4}$  oz.
- 7. Find the sum of n quantities in A. P. by a general formula.
- 8. The sides of a triangle are in G. P.; the ratio of the first to the second is  $3\frac{1}{3}:4\frac{1}{6}$ , and the perimeter is 490 feet: Find the sides.
- 9. Define the base of a system of logarithms; the logarithm of a number.
- 10. State and prove the rule for raising a number to any power by logarithms. What advantage have common logarithms over the logarithms to any other base but 10?

## SENIOR MATHEMATICS.

- Trace the signs of the Sine and Cosine throughout the circle, and give the appropriate signs to the Sine and Cosine of  $[(2n+1)\pi+A]$ , supposing A less than  $\frac{\pi}{2}$ .
- 2. Find the Sine and Cosine of 2A; and the Sines of 15° and 18°.
- 3. Find the sine of nA.
- 4.  $\cos A + \cos B = 2 \cos \frac{1}{2} (A + B) \cos \frac{1}{2} (A B)$ .
- 5. Cosec 2A+Cot 2A=Cot A.
- 6. In order to ascertain the height of a mountain, a base was measured of 2761 feet, and at either extremity of this base were taken the angles formed by the summit and the other extremity. These were 58° 29′ and III° 52′; also at the extremity where this latter angle was taken the angular height of the mountain was II° 18′: Required the mountain's height. Log. 58° 29′, 9.93069. Log. 170° 21′, 9.22435. Log. II° 18′, 9.29214. Log. 2761, 3.54107. Log. 2751, 3.43955.
- 7. The angles at the base of an isosceles spherical triangle are equal.
- 8. The sum of any two angles of a spherical triangle is greater than the third angle by a quantity less than  $\pi$ .

9. In any spherical triangle

Tan. 
$$\frac{1}{2}$$
A =  $\sqrt{\frac{\sin(s-b)\sin(s-c)}{\sin s \sin(s-a)}}$ 

10. State Napier's analogies, and apply them to show that

1st: The difference of two angles is less than 180°.

2nd:  $\frac{1}{2}(a+b)$  and  $\frac{1}{2}(A+B)$  have always the same affection, and

3rd: (a-b) and (A-B) have always the same sign.

- II. Given the Sun's Altitude and Declination, and the Latitude of the place, find the local time.
- 12. To what three great circles may the place of a heavenly body be referred, and by what terms are the coordinates of its position with regard to each denoted?

### SECOND PAPER.

- 1. Express 6587 in the duodenary scale.
- 2. Find the 12th term of 1, 5, 15, 35, 70, &c., and sum 10 terms.
- 3. Shew how to find a third proportional to  $.948^5$ ,  $.000526^{\frac{1}{3}}$
- 4. Expand by the method of indeterminate coefficients  $\sqrt{a-x}$ .
- 5. Solve the Equation

$$x^{y} = y^{x}$$

$$x^{3} = y^{2}$$

- 6. In what time will \$500 amount to \$900 at 5 per cent. compound interest? Log 3=.477121. Log 5=.698970, and Log 1.05=.021189.
- 7' If the annual value of a freehold be \$A, what is the present value at 6 per cent. compound interest?
- 8. Find the yearly premium to be paid on a life insurance policy for \$2000, at 6 per cent. rate of interest, the expectation of life being 20 years. Log. 106=.025306
- 9. Define a vanishing fraction, and find the value of  $\frac{a^4-b^4}{a-b}$  when b becomes equal to a.

- To. Give the *continuous* fraction to  $\frac{a}{b}$  and find the first three converging fractions to  $\frac{186}{45}$
- II. Find the value of the subnormal in the Parabola.
- 12. In the Ellipse  $y^2 = (1-e^2)(a^2-x^2)$ , when the coordinates are rectangular, and the origin is at the centre.

### NATURAL PHILOSOPHY.

- Define the moment of a force; triangle of forces; polygon of forces.
- 2. Find the centre of gravity of a triangle, and state why the centre of gravity of a revolving wheel must be in the axis.
- 3. State the ratio of P:W common to all the mechanical powers according to the principle of the constancy of work done.
- 4. Explain the action of the differential pulley.
- 5. A body being projected upwards or downwards with a velocity V, find v the velocity at any point of its ascent or descent.
- 6. Find the space through which the moon is drawn towards the earth in one second, its distance being taken to be 60 of the earth's radii.
- 7. How does the *time* of vibration vary with the length of the pendulum? How does the *number* of its vibrations in a given time vary as the force of gravity varies?
- 8. Find the ratio of the pressures on two spheres just immersed, the radii being 2 and 5 respectively.
- 9. How is the volume of an irregular solid found most accurately?
- 10. Water spouts from an orifice in a vertical side of a vessel at 16 1-12 feet below the level of the liquid: Find the range of the jet on a horizontal plane 4 feet below the opening.

- T1. A volume of air at 60° Fahr. and 30 inches pressure contains 100 cubic inches; what is its volume at 90°, and pressure 29.5 inches?
- 12. Some air being left in a barometer tube 33 inches long, it is found that the mercury in it stands at 29 inches when in a perfect barometer it is at 30; find the altitude in the imperfect instrument when that in the perfect is 25 inches.

- State Kepler's laws and the inferences immediately deducible from them.
- 2. Describe Foucault's experiment proving the rotation of the Earth on its axis, and state the hourly motion of revolution of the swinging ball in any latitude.
- 3. Give the lengths of a Sidereal, a Mean Solar day; a Sidereal, Tropical, Anomalistic year. Explain generally the differences between these periods.
- 4. Give the Sidereal and Synodic periods of revolution of the moon, and give the reason of the difference.
- 5. How do Refraction and Parallax vary? Prove the law of variation in each.
- 6. State generally the cause, and phenomena, of the tides.
- 7. Mention the principal Theories according to which Magnetic phenomena may be explained.
- 8. State the laws of current attractions and repulsions. What is the law of squares?
- 9. State Ohm's law, and prove some of the conclusions which follow from it as to the proper arrangement of batteries, and their connections, for particular purposes.
- 10. What is the direction of the earth's current, and how is the current itself accounted for?
- II. An iron core is surrounded by a helix through which an electric current passes; assume a direction for the current, and shew by a sketch the polarity excited in the bar.

### LOGIC.

- 1. Give the symbol for each of the following propositions:
  - (a) True freedom is not caprice.
  - (b) No true ruler is useless.
  - (c) Certain books are obscure.
  - (d) Men are responsible.
  - (e) Some princes hasten revolution.
  - (f) Some men of genius are not appreciated.
- 2. (1) On what principle is the quantification of the predicate based? (2) Convert the following propositions both according to Whately's rules (stating the *kind* of conversion) and by Hamilton's method:
  - (a) Vital action is not force.
  - (b) Some men are poets.
  - (c) Man's unhappiness is due to his greatness.
  - (d) Some nations progress.
  - (e) Some passions are not wrong.
  - (f) No indolent men are useful.
  - (g) Man is a free agent.
  - 3. Give the opposites of each of the following propositions:
    - (a) No man is perfect.
    - (b) Some witnesses are not trustworthy.
    - (c) The animals are void of reason.
    - (d) Some rational beings are fallible.
  - 4. Reduce the following syllogisms to the first figure:
    - (a) No vice is praiseworthy.

Some actions are praiseworthy.

Therefore, some actions are not vices.

(b) All acts of homicide are cruel.

Some acts of homicide are laudable.

Therefore, some laudable acts are cruel.

(c) Some syllogisms are not regular.

All syllogisms are important.

Therefore, some important things are not regular.

(5.) Give a concrete example of (1) the Enthymeme, (2) the Epicheirema and (3) the Sorites.

- 6. (1) When can a hypothetical syllogism be reduced simply to a categorical? (2) Give an example.
- 7. (1) State and explain the different kinds of fallacy.
  - (2) What-benefit arises from a study of fallacies?

### METAPHYSICS.

- 1. The relation of Common Consciousness and Philosophy.
- 2. What is the meaning of the "indeterminate" of Anaximander?
- 3. Explain the "flux" of Heraclitus.
- 4. Give Aristotle's account of the origin of Plato's theory of Ideas.
- 5. State and examine Spencer's derivation of Space.
- 6. Criticise the Leibnitzian theory of the relation of soul and body.
- 7. What is the imperfection of the Sensuous Consciousness?
- 8. Give a short account of the development of Self-consciousness.
- 9. Explain Locke's distinction of simple and complex ideas. Can any real knowledge be derived from Sensation?
- 10. How far did Berkeley carry out the philosophy of Locke to its logical result?
- II. Give Hume's classification of Perceptions. Is there any real opposition between his Impressions and his Ideas?
- 12. Explain and illustrate Kant's distinction of the Analytical and the Synthetical Judgment.

#### ETHICS.

 Show that no standard of Morality can be drawn from the doctrine of Evolution.

- 2. What is Aristotle's objection to the Socratic thesis, that Virtue is Knowledge? Give and explain his own definition of Virtue.
- 3. Point out the relation between the metaphysical and the ethical views of the Epicureans.
- 4. What problem were the Gnostics and Neo-Platonists trying to solve? Show the imperfection of their method by a reference to Hegel's criticism of Schelling.
- 5. Distinguish between Appetite and Desire, and classify the Desires.
- 6. What is the ethical meaning of Repentance? Explain how Passion gives rise to the notion of Duty.
- 7. What are the different kinds of Law by which Locke seeks to account for moral Responsibility? Criticise his view.
- 8. State and examine the ethical theory of Mandeville.
- 9. What is Hume's account of Sympathy? Does it cohere with his general theory?
- 10. What objection to Freedom is drawn from the relation of Motives to the Will? How do you reply to it?
- 11. Point out the elements involved in the Stoical notion of Personality.
- 12. Distinguish between Fraud and Crime.
- 13. The relation of Right and Duty.
- 14. Distinguish between Crime and Sin, and mark out generally the sphere of the State and of Religion.

### CHEMISTRY.

- 1. How and to what extent is the volume of a given weight of gas affected by (a) change of temperature, (b) change of pressure?
- 2. If 100 c.c. of gas at 40°c and 750 mm pressure be subjected to 1000 mm. pressure and raised to 100°c., find its volume.
- 3. From the decomposition of water by electricity deduce the atomic and specific weights of its elements.

- 4. Explain the nature and cause of the thermotic changes, when Ammonic Nitrate is put into water,—water is mixed with alcohol,—water is added to quickline,—a gas is suddenly allowed to expand.
- 5. Give illustrations of Potential and Kinetic energy. What is the mechanical equivalent of heat, and how is it found?
- 6. Explain the character and method of production of an absorption spectrum.
- 7. Give the composition of the atmosphere, and prove that it is a mechanical mixture.
- 8. Obtain Carbon Dioxide and describe it. How is it changed into Carbon Monoxide?

- 9. Describe the structure of a common flame, and thence explain the action of the blowpipe—of "Bunsen's burner."
- 10. Eescribe Iodine, and explain how it in any way becomes a test for the presence of Chlorine.
- II. State how you could obtain,—Acetic Acid, Phosphorus Potassic Hydrate, Chrome Yellow, Rouge, Soluble Prussian Blue.
- 12. Symbolize the changes, and name the products when,—

Alcohol is boiled with Sulphuric Acid. Copper is boiled with Sulphuric Acid. Arsenic is heated in Air.

Sodic Amalgam is put into solution of Ammonic Chloride.

Manganic Dioxide is heated with Potassic Chlorate.

- 13. What common applications have,—Potassic Nitrate, Carbon Disulphide, Borax, Calcic Sulphate, Cupric Oxide, Alum?
- 14. Describe any common battery that does not evolve Hydrogen, and show what becomes of that gas.

### NATURAL SCIENCE.

### BOTANY AND ZOOLOGY.

1. Describe the structures or processes denoted by the terms: Parenchyma, Alburnum, Conjugation, Stoma, Aril, Differentiation.

- 2. Distinguish between: Cryptogams and Phænogams Exogens and Endogens, Angiospe rms and Gymnosperms, Anophytes and Thallophytes.
- 3. Describe the modifications in Flowers produced by cohesion of (a) the stamens, (b) the pistils.
- 4. Illustrate the law of alternate Phyllotaxis, and explain the nature of fascicled leaves.
- 5. Describe a plant of the order Labiata.
- 6. Give the principal distinctions between Vertebrate and Invertebrate animals.
- 7. Describe  $A m \omega b a$ . Mention some other protozoa very important in the economy of nature.
- 8. Trace the reproductive changes in Medusa.
- 9. Describe briefly an *acephalous* Mollusc, and explain the nature and formation of its shell.
- 10. Classify the bones of the appendicular portion of the skele. ton, and notice any peculiarities in *Cheiroptera*, *Pterodactylus*.
- 11. Classify the teeth in man, and give their general modifications in (a) Ruminantia, (b) Rodentia, (c) Edentata.

### MINERALOGY AND GEOLOGY.

- I Classify the fundamental forms of crystals under the proper systems.
- 2. What is a *hemihedral* crystal? How are the hemihedral forms with parallel faces obtained from the cube?
- State generally how a mineral might act under an acid and what each action would indicate.
- 4. Describe Galena, give methods of reducing it, and find what percentage of metal it should yield.
- 5. Mineral greenish, soft, lamellar, with a greasy feel. Name it and give its uses.
- 6. What is the mineral composition, of *Granite*, *Syenite Gneiss*, *Slate*, *Sandstone*? To what division of rocks does each belong?

- 7. Explain the probable formation of chalk. What bodies does it most usually contain?
- 8. Explain the formation of joints in rocks—of cleavage.
- 9. Describe briefly the Tertiary System.
- 10. Describe the deposit called the "drift." The "ice age" probably consisted of a number of cold periods alternating with warmer ones; give Croll's explanation.

### HISTORY.

- 1. What constituted the bonds of National Union between the Greek States.
- 2. What was the conduct of the several States of Greece during the Persian Wars, and what were the general results of those wars upon Greece.
- 3. What was the origin of the Amphictionic Council of Delphi?
- 4. What were the sources of the Athenians' Revenue?
- 5. Distinguish between the Aristocracy and a Democracy, especially in regard to the Greek States, and in a Democracy like Athens how was the full exercise of its privileges of citizenship regulated?
- 6. Point out the relation between the Greek and Latin stocks.
- 7. Who were the Etruscans? What do we know of their origin? How did they affect the progress of Rome?
- 8. Explain the form "Patres et Conscripti."
- 9. Under what circumstances and for what purposes was the Tribunate established? What was the extent of the powers of the Tribunes?
- 10. What were the terms of the Lucinio Sextian laws?
- Describe briefly the subjugation of the other states in the Italian Peninsula to Rome.

- 1. The terms Goths and Vandals is generally associated with the idea of ruthless destroyers. Is this strictly correct? Give reasons for your answer.
- 2. Describe briefly the conquest of Gaul by the Franks, and compare it with the conquest of England by the Anglo-Saxons.
- 3. How were the lands of France partitioned among the conquerors, and where do we find mention of the mode of of that division?
- 4. What was the extent of Charlemagne's Kingdom, and what final partition of that Kingdom was made among the sons of Louis le Debonnaire? What was the effect of that division?
- 5. Contrast the History of the Municipalities under the Roman Empire, and in the French Kingdom.
- 6. State the Antifeudal influence of the Crusades.
- 7. Point out the encroachments of the Royal Power in France on the privileges of the Gallican Church in regard to (1) Internal, (2) Judicial, (3) Financial affairs.
- 8. Before the outbreak of French Revolution the nation was in great financial difficulties, what measures were taken to meet those difficulties? State the circumstances.
- 9. Compare the Royal Power in France and in England, in its growth and extent.
- 10. State the more immediate circumstances which resulted in the Magna Charta.

## ENGLISH LANGUAGE AND RHETORIC.

- 1. What foreign elements have contributed to the English Language and in what proportion.
- 2. Give Grimms' tables of the variation of Consonants, and give some examples.
- 3. Distinguish between an inflected and an uninflected lan-

guage, and give some examples of the growth of inflections in nouns and verbs.

- 4. What is necessary to the true expression of grammatical gender, and how is the deficiency supplied in English.
- 5. Give the history of the third personal pronoun, it, its.
- 6. Explain such forms as drinking water, stepping stone, riding horse.
- 7. Name the four classes of derived verbs: also the classes of weak verbs, and state any facts in regard to the relative position of weak and strong verbs in the Anglo-Saxon and Romance portions of our Language.
- 8. Explain such adverbial forms as else, whence, awry, akimbo, random, seldom.
- 9. Name the Figures of Speech, and give one or more examples of each.
- 10. State the rules to be observed in description.
- 11. Name the different species of Poetry.
- 12. Name examples of each of the forms of the Epic.

### ENGLISH LITERATURE.

- I. Characterize in a general way and contrast the early Celtic, the Anglo Saxon, and the Semi-Saxon Poetry.
- 2. What was the effect of the Norman Conquest on the literature, as well as language of England.
- 3. Compare the English ballads with the writings of the French Iongleurs.
- 4. Contrast the Drama of the Unities with the Romantic Drama.
- 5. State the general design of the Faery Queene, and mention any defects.
- 6. Name the Metaphysical Poets, and point out the peculiarities of their style.

- 7. Contrast the Elizabethan Drama with the Drama of the Restoration—the Revived Drama.
- 8. Name Milton's Prose Works, and state any peculiarities of his prose style.
- 9. Name Dryden's satyrical writings, and tell against whom they were directed.

### GERMAN

1. Translate: Die Jungfrau von Orleans.

Bieter Auftritt.

Johanna (alletn). Lebt wohl, ibr Berge, ibr geliebten Trijten. Ihr traulich stillen Thäler, lebet woht!

Johanna wird nun nicht mehr auf euch wandeln, Johanna fagt euch ewig Lebewohl.
Ihr Wiefen, die ich wässerte! Ihr Bäume,
Die ich gepflanzet, grünet fröhlich fort!
Lebt wohl ihr Grotten und ihr fühlen Brunnen!
Du Echo, holde Stimme dieses Thals,
Die oft mir Untwort gab auf meine Lieder,
Johanna geht und nimmer kehrt sie wieder!

Ihr Pläte alle meiner stillen Freuden, Euch lass' ich hinter mir auf immerdar!
Zerstrenet euch, ihr Lämmer, auf der Heiden!
Ihr seid jest eine hirtenlose Schaar:
Denn eine andre Heerde muß ich weiden,
Dort auf dem blut'gen Felde der Gefahr.
Ev ist des Geistes Ruf an mich ergangen;
Wich treibt nicht eitles, irdisches Berlangen.

Denn der zu Mosen auf des Horebs Höhen Im seur'gen Busch sich flammend niederließ, Und ihm befahl, vor Pharao zu stehen, Der einst den frommen Anaben Isai's. Den Hirten sich zum Streiter ausersehen, Der stets den Hirten gnädig sich bewies, Er sprach zu mir aus dieses Baumes Zweigen: "Geh hin! Du sollst auf Groen für mich zeugen."

"In ranhes Erz follst du die Blieder schnüren,

Mit Stabl dedecken deine zarte Brust; Nicht Männerliede darf dein Herzkberühren Mit sumd'gen Flammen eitler Erdenlust. Nie wird der Brantfrauz dein Locken zieren, Dir blüht fein lieblich Hind an deiner Brust; Doch werd' ich dich mit friegerischen Ehren, Bor allen Erdenfranen dich verklären."

"Den wenn im Kampf die Muthigsten verzagen, Wenn Frankreichs lettes Schickal unn sich naht, Dann wirst du meine Driftamme tragen Und, wie die rasche Schnitterin die Saat, Den stolzen Ueberwinder niederschlagen; Umwälzen wirst du seines Gluckes Rad, Errettung bringen Frankreichs Seldensöhnen. Und Rheims befreien und deinen König frönen!"

Ein Zeichen hat der Hunmel mir verheißen: Er sendet mir den Helm, er kommt von i h m; Mit Götterfrast berühret mich sein Eisen, Und mich durchstammt der Muth der Cherubim; In's Kriegsgewühl hinein will es mich reißen, Es treibt mich sort mit Sturmes Ungestüm! Den Feldruf hör' ich mächtig zu mir dringen, Das Schlachtroß steigt und die Trompeten klingen.

- 2. Parse: Triften, gab, gebt, Schaar, (Befahr, ergangen, Berlangen, niederließ, befabl, bewieß, sprach, Erz, darf, Frankreichs, tragen, niederschlagen, sendet, (Vötterfraft, treibt, flingen.
- 3. Decline trift with geliebt and the definite, also indefinite article and without any article; also letter Schiefial in the same way.
- 4. Conjugate imperfect and perfect indicative of wandeln, geben, bringen, iprechen, betrügen, empfangen and halten.
  - 5. Give a list of the prepositions governing the dative, and the accusative, and the dative and accusative together; when do they take the dative and when the accusative?
  - 6. Give the different ways for rendering by, at, with and about in German.

# 1. Translate into German,—

Sir Isaac Newton's temper (das (Semüth) is said (jöll) to have been so equal (gleichmüthig) and mild, that no accident (sufall) could disturb (jtören) it; a remarkable instance (Beijviel) of which (bayon) is related as (wie) follows:—Sir Isaac had a favourite little dog (ein Lichtings-Hünden) which he called Diamond. Being one evening called out of his study (Etnoier'simmer) into the next room, Diamond remained behind (blick D. surict). When Sir Isaac returned, having (nadown or mir) been absent but a few minutes, he had the mortification (den Berdruß) to find that Diamond had overturned (ungeworfen) a lighted (bremund) candle among some papers, which were the nearly finished (vollendet) labour of many years. The papers soon were (itanden) in flames, and (were) almost consumed (su Niche verbraunt) to ashes. This loss (der Berluit), from Newton's advanced age, (wegen N.'s hoben Ulters) was irreparable (uncrientian); but, without punishing the dog, he exclaimed: -"O Diamond! you (du) don't know what mischief (das Unbeil) you have done!"

- 2. What nouns belong to each declension, and tell how the plural of each is formed?
- 3. Distinguish between the use of Mögen and Durfen.
- 4. Distinguish between the use of Zein and Werden with a passive signification.
- 5. Give a list of the simple inseparable, and separable prefixes of verbs.
- 6. Give the several meanings of laffen.
- 7. Give the rules for the construction of simple, and inverted sentences.

# SESSION 1877-78.

# FACULTY OF ARTS.

### HONOUR PAPERS.

### MATHEMATICS.

- No Equation can have more positive roots than changes of signs from + to -, and from - to + in its terms, nor can it have more negative roots than successive repetitions of the same sign.
- 2. Find all the roots of the Equation  $x^3-7x^2+16x-12=0$ , two roots being equal.
- 3. Find the roots of  $x^3-3x^2-6x+8=0$ , the roots being in A. P.
- 4. Transform into an Equation having integral coefficients  $x^4 \frac{5}{6}x^3 + \frac{5}{12}x^2 \frac{7}{150}x \frac{13}{200} = 0$
- 5. Form the Equation whose roots are the roots of  $x^3+18x^2+99x+81=0$ , each divided by -3.
- 6. Solve the Equation  $x^5 \frac{1.5}{2}x^4 + \frac{3.7}{2}x^3 \frac{3.7}{2}x^2 + \frac{1.5}{2}x 1 = 0$ .
- 7. Find the roots of the Equation  $x^3-7x^2+14x-20=0$ .
- 8. Find the roots of  $x^3-7x+6=0$ , by Trigonometry.
- 9. If the roots of  $x^3-px^2+qx-r=0$  are in H. P., shew that the mean root  $=\frac{r}{\frac{1}{3}q}$ , and thence find the roots of  $x^3-11x^2+36x-36=0$ .
- 10.  $x^3-5x^2+16x-12=0$ , and  $x^3-2x^2-15x+16=0$ , have one root common: find the roots.
- 11. Solve by Ferrari's method  $x^4-4x^3-8x+32=0$ .

### SECOND PAPER.

- 1. Find the value, in terms of the radius, of the side of a decagon inscribed in a circle.
- 2. Given the radius of a circle, and the side of an inscribed

regular polygon, find the side of a similar circumscribed one.

- 3. Describe a circle that shall touch a given straight line and pass through two given points, through which the straight line that passes will meet the given line.
- 4. Two straight lines being given, find their point of intersection, and also their angle of intersection.
- 5. Find the polar Equation to the Ellipse, the pole being in the focus.
- 6. Find also the Equation to the tangent.
- 7. In an Ellipse the rectangle under the perpendiculars from the foci on the tangent at any point is equal to the square of the semiaxis minor.
- 8. In the same curve SP. PH=CD<sup>2</sup>, and CP<sup>2</sup>+CD<sup>2</sup>= $AC^2+BC^2$ .
- 9. In an Ellipse CD. PF=AC. BC.
- 10. Define the circle of curvature in any curve, and find the chords of curvature parallel to the axis, and through the focus, and also the diameter of curvature, in the Parabola.

### THIRD PAPER.

- 1. How do you determine, whether a quantity has a maximum or minimum value, or not, and, if it has, how do you determine, whether that value is a maximum or a minimum?
- 2. Describe about a given circle the least isosceles triangle.
- 3. Derive from the Exponential Theorem the differential of  $a^x$ . Differentiate  $y^{xz}$ ,  $\frac{a^x-1}{a^x+1}$ ; integrate  $\frac{3dx}{a+x}$ ,  $\frac{xdx}{1+\frac{4x^2}{a^2}}$ .
- 4. Find from the expansion of Log (r+x) a rapidly converging series for the calculation of logarithms.
- 5. Find the differential of the arc of a circle in terms of the sine, and apply it to find the circumference of a circle.
- 6. Find the area of a parabola; the solidity of a paraboloid.

- 7. Find the expressions for the radius of curvature in any curve, and thence the radius of curvature in the curve  $y=e^x$ .
- 8. Prove Taylor's Theorem, and apply it to find cosin w in terms of the arc.

# FOURTH PAPER. (Newton.)

- I. If h be twice the area passed over by the radius vector in I", prove  $F = \frac{2h^2QR}{QT^2SP^2} = \frac{2h^2QR}{PQ^2SY^2}$
- 2. Find the value of F in an Ellipse, the force tending to the centre.
- 3. Find F in an Ellipse, the force tending to a focus.
- 4. Find F tending to the focus in a Parabola.
- 5. If different bodies revolve in Elliptical orbits round a common centre of force, the force varying as  $\frac{I}{D^2}$ , prove that the squares of the periodic times are as the cubes of the mean distances.
- 6. Having given 1:390, the ratio of the moon's distance from the earth to the earth's distance from the sun, and 365\frac{1}{3}:27\frac{1}{3}, the ratio of the periodic times of the Earth and Moon, prove, that the ratio of the mean force acting on the Earth to that on the Moon is 2.17 nearly.
- 7. When is the paracentric velocity a maximum? In what point of the Conic sections is it so? Does it admit of a maximum in a circle, the centre of force being in the circumference, and, if so, what is its amount?
- 8. Determine the point in an Ellipse, the force being in the focus, in which the velocity is a geometric mean between the velocities at the greatest and least distances.
- 9. If a body move in an orbit by a force, tending to a centre and varying as \(\frac{1}{D}\)^2, prove that it will describe a conic section, and point out the conditions of velocity on which it depends whether a Cometary orbit be an Ellipse, a Parabola, or a Hyperbola.

### LOGIC AND METAPHYSICS.

- 1. Staie the chief objections made by Aristotle to Plato's theory of Ideas, and estimate their value.
- 2. What antagonistic elements are implicit in the philosophy of Descartes?
- 3. Can Locke consistently account for a Science of Nature?
- 4. Distinguish between the Monadism of Leibnitz and Pure Individualism.
- 5. Compare Leibnitz' account of Time and Space with that of Kant.
- 6. Examine Locke's Theory of Mind.
- Estimate the value of Trexdelenburg's criticism of Kant's Æsthetic.
- 8. What inconsistency is there in Leibnitz' account of the principle of Sufficient Reason? Point out the source of the inconsistency.
- 9. Explain and criticise Kant's conception of the relation of Formal Logic and Transcendental Logic.
- 10. What are the problems of the Analytic and the Dialectic respectively?
- II. The relation of the Critique of Pure Reason and Hegel's Science of Logic.
- 12. What is the true meaning of the distinction in Kant's *Prolegomena* between judgments of Perception and judgments of Experience?

#### SECOND PAPER.

- 1. Compare Hume and Kant on the question of Infinite Divisibility.
- 2. State the view of Mathematical Truth given in the *Treatise* of Human Nature. What reply may be drawn from the Critical Philosophy?
- 3. Criticise Hume's account of Identity.
- 4. How does Hume attempt to dispose of Personal Identity?

- 5. Is the Critique of Pure Reason psychological in its Method? Does it contain psychological elements?
- 6. Is Kant's treatment of Inner Sense, in the Schematism of the Categories, consistent with his own principles?
- 7. Estimate the value of Schopenhauer's objection to Kant's deduction of Causality.
- 8. What place does Psychology occupy in Kant's general scheme of the Sciences? Examine his view.
- 9. Is the distinction drawn by Kant between Attraction and Repulsion a valid one?
- 10. How does Kant account for the antinomial character of Reason? Why does he hold that there are only four Antinomies? Is there any ground for the limitation?
- 11. Does Physiology help to solve any problem of Philosophy?
- 12. Is Force the highest category of Thought? Illustrate by referring to the doctrine of the Conservation of Energy.

### ETHICS.

- 1. Compare Plato's Ideal State with the constitution of a Modern State.
- 2. The relation of Aristotle's Ethics to his Metaphysics.
- 3. Compare the social ethics of Plato and Aristotle.
- 4. The relation of Spinoza to Descartes.
- 5. "Omnis determinatio est negatio." Show in detail the influence of this principle on the philosophy of Spinoza.
- 6. "Voluntas non potest vocari causa libera sed tantum necessaria." How was Spinoza led to this conclusion? Criticise his view of the Will.
- 7. "Summum mentis bonum est Dei cognitio, et Summa mentis virtus Deum cognoscere." Show the connection of this proposition with Spinoza's conception of God.
- 8. State and criticise Butler's account of Moral Goodness.

- 9. What are the only motives to action admitted by Hume? Are these identical with feelings of pleasure?
- 10. Can Hume consistently make any distinction between "natural" and "artificial" Virtue?

- I. In what sense alone can Hume say that an action "ought" to be done? Show that his system necessarily leads to this view of moral obligation.
- 2. "The principle on which the whole Critical Philosophy depends is found in the Practical Reason." Show that Fichte was justified in going upon this supposition.
- 3. Explain how Kant comes to hold that Practical Reason is able to solve problems which are insoluble by Speculative Reason. Is the opposition of the two forms of Reason justifiable?
- 4. "The law to 'act on a maxim that one can will to be law universal' is an error analagous to that of supposing that Formal Logic supplies a criterion of truth." Examine into the validity of this criticism.
- 5. "Pleasure for Pleasure's sake." "Duty for Duty's sake." Show that neither of these formulæ is adequate, and that a true ethical theory must reconcile them.
- 6. Give Kant's classification of ethical systems alleged to rest upon a Material principle. Is his own view of the Antinomy of the Will defensible?
- 7. How did legal "fictions" help to bring Law into harmony with society?
- 8. Trace the growth of conceptions of contract.
- 9. The relation of Hegel's Philosophy of History to his Philosophy in general.
- 10. "There are two ends which, on the Necessitarian theory, are sufficient to justify Punishment; the benefit of the offender, and the protection of others." Estimate the value of this view of Mill.
- II. "The term 'Happiness' is ambiguous." Show this by a reference to the ethical views of Locke, Kant and Mill.
- 12. The relation of Morality and Religion.

### HISTORY.

- 1. Name some of the great political documents which may be regarded as successively forming great *Landmarks* in English political history.
- 2. How far is proper to speak of the Three Estates in regard to legislation in England?
- 3. Which House of Parliament is strictly the successor of the Anglo-Saxon Witenagemote, and what do we know of the constitution of that ancient body?
- 4. In a political and legislative point of view what were the results of the Norman Conquest? What was the character and cenduct of the Norman Kings?
- 5. How far were the constitutions of Clarendon regarded as binding by both the Church and the Crown? What was the popular feeling in regard to the Church and the Crown under both the Norman and Angeoin Kings.
- 6. What was the occasion of the calling of the Oxford Parliament of 168r.
- 7. Trace historically the judicial power of the House of Lords. When was the Privy Council of the English kings superseded by a Cabinet? State the circumstances.

## SECOND PAPER.

- I. State the general epochs into which the history of England's political institutions may be divided and the peculiar features of each epoch.
- 2. State the principal divergent views which have prevailed among the different nations of Europe regarding the exercise of the powers of Legislation.
- 3. What are the conditions which may be regarded as essential to a true representative System?
- 4. What national assemblies existed under the earlier Frankish Kings and how far were they representative?
- 5. State the most prominent features of the Feudal System.
- 6. What three conditions of representative Government are laid down by Guizot and how have these been observed in the British Government.

- 7. What are known of Acts of Oxford? What were the circumstances of their being passed?
- 8. When did the houses of Parliament in England first have a separate existence? Under what circumstances?

### ENGLISH LITERATURE.

## 1. Translate:-

# Battle of Maldon.

Sende tha se sæ-rinc sutherne gar, tha gewundod wearth wigena hlaford; he sceaf tha mid tham scylde, thæt se sceaft tobærst, and thæt spere sprengde, thæt hit sprang ongean; gegremod wearth se guth-rinc, he mid gare stang wlancne wicing, the him tha wunde forgeaf. Frod wæs se fyrd-rinc,

he let his francan wadan thurh thæs hysses hals; hand wisode thæt he on tham fær-sceathan. feorh geræhte; tha he otherne ofstlice sceat, thæt seo byrne tobærst, he wæs on breostum wund thurh tha hring-locan; him æt heortan stod ætterne ord.

- 2. Parse sceaf, sprengde, gegremod, stang, wicing, wisode, farsceathan, tobarst, stod.
  - 3. Translate—Layamon's Brut.

In France wes a king riche and swithe kene. Aganippes wes ihaten, hælethen he was ældere; he wes a yenge king, ah quene nauede he nane. He sende hiis sande into thisse lande. to Leir than kinge, and leofliche hine gret; he bæd hine don is iwille. veuen him Cordoille. and he heo wolde habben hæye to are quene, and æfter hire don ærest. that hire were alre leofust. Feor haueden lithende men ispeken of than mæidene feivernesse and freoscipe atforen than Frensce kinge. of hire mucla fæira wlita, of hire muchela monschipe. hu heo wes tholemod, of fæire hire theæwen, that nes on Leir kinges lond

nan wifman al swa hende And the king Aganippus igrette Leir kin thus. Leir kin hine bithohte, wat he don mohte: he letten writen a writ, and wel hit lette dihten. and sende hit bi his sonde in Frauncene londe: thus spec thes kinges writ, hit wes widen icuth: The king of Bruttaine, the Leir is haten, greteth Aganippus, thene aldere of Fraunce: Worthschepe haue thu thire wel-deda, and thire feire sonde, that grete thu me woldest: ac ic do the wel to witene, hær bi mine writ rich, that mi drihlice lond a twa ich habbe ideled, iyeuen hit mine twam dohtren. the me beoh swithe deore.

4. Parse nauede, sande, yeuen, lithende, tholemod, bithohte, dihten, sende, spec, witene, rich.

### SECOND PAPER.

# 1. Translate into modern English—

Gret was the fest in Athenus that day, And eek that lusty sesoun of that May Made every wight to ben in such plesaunce, That al the Monday jousten they and daunce, And spende[n] hit in Venus heigh servise. But by the cause that they schuln arise Erly a-morwe for to see that fight, Unto here rest [e] wente they at nyght. And on the morwe whan the day gan spryng[e], Of hors and hernoys noyse and clateryng[e] Ther was in the oostes al aboute; And to the paleys rood ther many a route Of lordes, upon steed and on palfreys. Ther mayst thou see devysyng of herneys So uncowth and so riche wrought and wel Of goldsmithry, of browdyng, and of steel; The scheldes bright[e], testers, and trappures; Gold-beten helmes, hauberks, and cote-armures; Lordes in paramentz on her[e] courses, Knightes of retenu, and eek squyers Rayhyng the speres, and helmes bokelyng, Girdyng of scheeldes, with layneres lasyng; Ther as need is, they were nothing ydel; Ther fomen steedes, on the golden bridel Gnawying, and faste [the] armurers also With fyle and hamer prikyng to and fro; Y.emen on foote, and knaves many oon With schorte staves, as thikke as they may goon: Pypes, trompes, nakers, and clariounes, That in the batail blewe bloody sownes; The paleys ful of pepul up and doun, Heer thre, ther ten, haldyng her[e] questioun, Dyvynyng of this Thebans knightes two. Som seyden thus, som seyd it schal be so; Som heelde with him with the blake berd, Som with the ballyd, som with [the] thikke hered; Som sayd he loked[e] grym and wolde fight[e]; He hath a sparth of twenti pound of wight[e]. Thus was the halle ful of devynyng [e], Lang after that the sonne gan to spring [e]. The gret[e] Theseus that of his sleep is awaked With menstralcy and noyse that was maked, Held vit the chambre of his paleys riche, Til that the Thebanes knyghtes bothe i-liche Honoured weren, and into paleys fet. Duk Theseus was at a wyndow set, Arayed right as he were god in trone. The pepul presed[e] thider-ward ful sone Him for to seen, and doon him reverence, And eek herken his hest and his sentence. An herowd on a skaffold made a hoo,

Til al the noyse of the pepul was i-doo; And whan he sawh the pepul of noyse al stille, Thus schewed he the mighty dukes wille.

- 2. Explain the words ben, schuln, hernoys, oostes, palfreys, brow-dyng, paramentz, retenu, rayhyng, bokelyng, layneres, lasyng, faste, yemen, nakers, seyden, ballyd, hered, sparth, menstralcy, i-liche, fet, seen, doon, herken, hest, herowd, hoo, i-doo.
- 3. Scan

Til al the noyse of the pepul was i-doo; And whan he sawh the pepul of noyse al stille, Thus schewed he the mighty dukes wille.

- 4. Translate into modern English—Færy Queene Book i Canto vii.
  - 1. What man so wise, what earthly wit so ware,
    As to discry the crafty cunning traine,
    By which deceipt doth maske in visour faire,
    And cast her colours dyed deep in graine,
    To seeme like truth, whose shape she well can faine,
    And fitting gestures to her purpose frame;
    The guiltlesse man with guile to entertaine?
    Great maistresse of her art was that false dame,
    The false Duessa, cloked with Fidessaes name.
  - 2. Who when, returning from the drery Night She fownd not in that perilous house of Pryde, Where she had left the noble Redcrosse knight, Her hoped pray; she would no lenger bide, But forth she went to seeke him far and wide. Ere long she fownd, whereas he wearie sate To rest him selfe, foreby a fountaine side, Disarmed all of yron-coted plate, And by his side his steed the grassy forage ate.
  - 3. He feedes upon the cooling shade, and bayes
    His sweatie forehead in the breathing wind,
    Which through the trembling leaves full gently playes,
    Wherein the chearefull birds of sundry kind
    Do chaunt sweet musick, to delight his mind:
    The witch approching gan him fairely greet.
    And with reproch of carelesnesse unkind
    Upbrayd, for leaving her in place unmeet,
    With fowle words tempring faire, soure gall with hony sweet.
  - 4. Unkindnesse past, they gan of solace treat, And bathe in pleasaunce of the joyous shade, Which shielded them against the boyling heat. And with green boughes decking a gloomy shade, About the fountaine like a girlond made; Whose bubbling wave did ever freshly well. Ne ever would through fervent sommer fade: The sacred nymph, which therein wont to dwell, Was out of Dianes favor, as it then befell.

- 5. Parse and give the derivation of the following words :wise, wit, ware, crofty, visour, dyed deep in graine, maistresse, Fidessaes, pray, bide, coted plate, forage, bayes, chaunt, gan tempring.
- 6. Scan

That man sourse, what earthly wit so ware. As to descry the crafty cunning traine.

# SESSION 1877-78.

# FACULTY OF THEOLOGY.

## PASS PAPERS.

## HEBREW.

FIRST YEAR.

- I. (I) What nouns have in the construct state both a subjective and an objective signification? (2) Which of these significations have pronominal suffixes?
- 2. Give the rule for the article when the noun is in the definite state and the adjective is attributive; also when the adjective is predicative.
- 3. (1) What does Definitive?
  - (2) What other words are used in a similar way?
- 4. Decline the three personal pronouns.
- 5. State the peculiarities of  $\Lambda^{\parallel}$  verbs.
- 6. Give a paradigm of (1) pret. Kal סכל.
  - (2) pret. Hophal wil.
  - (3) fut. Hiphil קוֹם.
  - (4) fut. Niphal ンヴュ

- 7. Translate (1) Gen. XI. 1, 2, 3, 6.
  - (2) Gen. XII. 8, 9.
  - (3) Ps. XXXI. 11, 12, 19.
  - (4) Ps. XXXII. 4, 5, 9.
  - (5) Ps. XXXIII. 2, 16.
- 8. Analyze
  - ּוֹכִמְּוֹלַדְתָּהָ (ב) יָזְמָוּ (ג) הַחָּלָם (3) הַלְּבַנְהُ (2) הָהָבָה (1)
  - (6) יִּדְּכֶּוֹ (7) בַּעַוֹנֵי (8) יִּדְּכָוֹ (9) מֶּרֶכְםי (9) Ps. 31, 32,
  - (וס) הָכָתָה.
- 9. Point out the Hebraisms in Gen. I. 2.
- 10. Shew that Di in Gen. I. may mean an indefinite period, not a civil day.
- II. Reconcile Gen. I. 3-5 with I. 14-19.
- 12. Why is it supposed that אָחוֹת does not mean sister Gen. XII. 13?
- 13. State the peculiarities of Hebrew Poetry.
- 14. (1) To what classes of psalms do Ps. XXXII. and XXXIV. respectively belong? (2) What other psalms belong to to these two classes?
- 15. (1) How many psalms are ascribed to David? (2) In which of the five books are they?
- 16. What is the meaning of selah?
- 17. Reconcile the first and last clauses of Ps. XXXII. 3.
- 18. Reconcile Ps. XXXIV. I with I Sam. XXI. II.

### SECOND YEAR.

- 1. Translate (1) Isaiah XLIV. 12, 14, 25.
  - (2) "XLV. 8, 9, 24.
  - (3) " XLVI. 6, II.
  - (4) " XLVII. 9, 13.
  - (5) "XLVIII. 19, 21.
  - (6) "XLIX. 2, 26.
  - (7) " L. I, 3.

2. Analyze

- (1) נְקַלְ (12) בְּקַל (14) הַתְּלֶל (3) קּרָא (13) נְּחֶלֶת (12) בּקַל (13) בְּקַלָת (13) בְּקַלָת (14) בְּקַל (14) בְּקַל (14) בּקַל (14) בּקַל (15) בּקַל (16) בּקל (16) בּקל
- 3. What class of adjectives is almost wholly wanting in Hebrew?
- 4. For what objects not properly feminine is the feminine gender preferred?
- 5. In what various ways may the plural be expressed?
- 6. What proper names admit the article?
- 7. Give the Hebrew for
  - (I) Everyday, all the day. (State the rule).
  - (2) God of heaven and earth. (State the rule).
  - (3) Where he was.
  - (4) The one, the other.
- 8. When a feminine subject is connected with two adjectives what is the rule as to their gender?
- 9. Give the three ways of expressing (1) place where, (2) place whither.
- 10. Give the rules for the number of substantives when used with numerals.
- II. When must the accusative of the pronoun be expressed apart from the verb which governs it?
- 12. In what ways is the optative expressed?
- 13. Explain the syntax of the last two verbs, Exod. VII. 5.
- 14. Reconcile Exod. VII. 3 with James I. 13.
- 15. What are supposed to be the names of two of the magi, Exod. VII. 11?
- Shew the literal fulfilment of the prophecies, Is. XLV.
   1, 2, 3.

- 17. (1) Where did the Sabeans live? (2) What ancient authors testify to their being men of stature?
- 18. (1) What country is meant by Sinim, Is. 49: 12? (2) Give reasons in support of your answer.

#### GREEK TESTAMENT.

# EPISTLES TO EPHESIANS AND PHILIPPIANS.

- 1. Answer the objections of De Wette and the Tubingen school to the genuineness of the epistle to the Ephesians.
- 2. State the peculiarities of the epistle to the Philippians? Its date? Why is it supposed to be the latest of the Pauline epistles?
- 3. Translate (1) Eph. I. 10, 14, (2) IV. 14, 15, (3) V. 13, (4) VI. 19, (5) Phil. I, 3, 27, (6) II. 15, 13, (7) III. 12, (8) IV. 10.
- 4. Analyze (1) δπηλγημοτες, (2) σβεσω.
- 5. Derive (1) καταργεω, (2) ἀνεξιχνιαστος, (3) κυβεια, (4) εὐωδια, (5) ἀσωτια, (6) είλικρινης, (7) άποκαραδοκια.
- 6. Correct the textus receptus (1) Eph. III. 9, 14, (2) V. 9, 21, 30, (3) VI. 12, (4) Phil. III. 3, 16, (5) IV. 23.
- 7. Correct the authorized version (1) Phil. I. 13, (2) III. 20.
- 8. Explain the syntax of δμεις, Eph. I, 13.
- 9. Why is  $\varphi\omega\tau\sigma\varsigma$  anarthrous, Eph. V. 8.
- 10. Ἐπεμφα Phil. II. 28. What is the first agrist called here? Why is a past tense used?
- 11. What is the force of the first xue Phil. IV. 16?
- 12. Why does το λοιπον occur Phil. III. 1, so far from the end of the epistle?
- 13. Explain (1) ἐσφραγισθητε τφ Πνευματι Eph. I. 13, (2) Eph. II. 15, (3) the mystery to which Paul refers Eph. III. 4, (4) Eph. III. 19, (5) τα πνευματικα, κ.τ.λ. Eph. VI. 12, (6) Eph. VI. 15, (7) Phil. I 10.
- 14. Reconcile Phil. II. 20, 21 with I. 14, 17 and IV. 20, 21.

# BIBLICAL ANTIQUITIES AND INTRODUCTION.

- T. Describe the tabernacle.
- 2. Describe the various kinds of sacrifices.
- 3. Give an account of (1) the three great annual feasts.
  - (2) the Sabbatic year.
  - (3) the Jubilee.
  - (4) the two feasts not appointed by law.
  - (5) the only fast appointed by law.
- 4. State the number of (1) the cities of refuge.
  - (2) the Levitical cities.
  - (3) the dynasties and kings of (a) Judah (b) Israel.
  - 5. Defend the Mosaic authorship of the Pentateuch.
  - 6. Name the supposed authors of
    - (1) the other historical books of the Old Testament.
    - (2) the Psalms.
    - (3) the Proverbs.
  - 7. Give the reasons for holding the narrative to be historical (1) in Job (2) in Jonah.
  - 8. Into what two parts has the Book of Isaiah been divided? Give the reasons for maintaining the genuineness of the latter part.

# CHURCH HISTORY.

## CENTURIES XIII-XVIII.

Give an account of

- 1. The Inquisition.
- 2. The "great schism of the West."
- 3. The Reformers before the Reformation.
- 4. The causes which led to the Reformation.
- 5. The Reformation in Germany.
- 6. The Reformation in Scotland.
- 7. The Council of Trent.
- 8. The Jesuits.

## RELATION OF SCIENCE AND REVELATION

- 1. Name God's two books of instruction; and state causes of apparent discrepancy between them.
- 2. What principles of Natural Theology are taught by a scientific examination of Cosmogony?
- 3. Point out some principles of Huxley's teaching of which you approve; and one serious error underlying his views of protoplasm.
- 4. Define a Miracle, and illustrate the fact of its being natural.
- 5. What history does the Scripture include: and what information (of the past or future) beyond history does it give?
- 6. What are the resemblances and differences between men, angels and demons?
- 7. State the usual periods included in the prehistoric age of man.
- 8. What are the evidences adduced for the supposed great antiquity of man's existence?
- 9. To what probable errors are these evidences liable?
- 10. What serious objections to the theory of man's development from lower races arise from the fact of there being gaps in the continuity of the whole series of Nature? State the principal gaps.
- II. What fundamental difference distinguishes the intelligence of man from that of brutes?
- 12. What absolute difference between man and other animals is shown in the religious faculty?

# EVIDENCES OF CHRISTIANITY.

- 1. Why is it proper to distinguish between the judgment and the testimony of the Apostles? Illustrate.
- 2. How much does Paley consider to be proved by general allusions in the New Testament to Old Testament writers?
- 3. How came the Jewish Church to misinterpret the many Scriptures that spoke of the Christ?

- 4. Give instances of all but universal misinterpretations of Scripture on the part of the Christian Church.
- 5. What are two great sources of mistake on the part of writers who affirm that Christianity has not had a good influence on humanity?
- 6. What three undoubted facts that cannot be explained on naturalistic hypotheses constitute the historical basis of Christianity?
- 7. On what is Butler's argument based? What is its special force? What is its place and value in our day?
- 8. What objections may be urged against his argument, and how does he meet them?
- 9. Summarize the general course of his argument in Part II.
- 10. State and unfold the positive evidence for Christianity referred to in Ch. vii.

## SYSTEMATIC THEOLOGY.

- 1. Define Theology; state its sources, and explain their relations.
- 2. Show that there cannot be contradiction between (a) Physical Science and Philosophy, (b) Science and Theology, (c) Reason and Faith, (d) Natural and Revealed Religion.
- 3. Define Materialism, Pantheism, and Rationalism. State the truth and untruth in each.
- 4. What views of God, of Man, and of Sin are given in the first pages of the Bible?
- 5. Set forth in distinct theses the truth respecting the agency of the Holy Spirit.
- 6. State and answer the objections that have been urged against the Calvanistic doctrine of the Spirit's agency.
- 7. What views of God and man does the doctrine of Justification by faith presuppose? Out of what experience did Luther rise to the apprehension of its importance?

- 8. Explain the relations between Justification and Sanctification.
- 9. State and develope the argument of the Epistle to the Romans.
- 10. Unfold the relations of the law and the gospel.

# SECOND PAPER.

- 1. State the positions of Quakers, Independents, Presbyterians Episcopalians, and Romanists, with respect to the persons in whom Church Government is vested.
- 2. How do Presbyterians answer the argument from the early universal establishment of Episcopacy.
- 3. What various views have been held as to the relation that should exist between the Church and the State.
- 4. Define the potestas δογματίκη, and give the different theories as to its source and extent.
- 5. Give the names and dates of the first four General Councils, and the doctrines defined by them.
- 6. Define the potestas duzperez and the opposing views with regard to it.
- 7. Give Scripture instances of the distinction between freedom of conscience and freedom of practice.
- 8. Define the potestas διμηριπιηφ. Give the passages on which the right is founded, and our interpretation of them.
- 9. Give the New Testament teaching expressed and implied, concerning the visibility and unity of the Church.
- 10. Account for the unchallenged supremacy of the Church in the Middle Ages.

# PASTORAL THEOLOGY.

- 1. Define "Pastoral Theology," and distinguish it from both Practical and Dogmatic Theology.
- 2. State the New Testament theory of the Christian Ministry;

and show how it differs on the one hand, from the Sacerdotal Theory of Romanists and Anglicans, and on the other hand, from that of Plymouthism.

- 3. Exemplify the value of Holy Scripture as an aid to ministers in their preparations for public prayer. Mention other aids which may be advantageously used to this end. Enumerate the leading divisions of public prayer.
- 4. Mention some of the advantages, in the conduct of public worship, of not being rigidly bound by liturgical forms; and point out the additional responsibility which non-liturgical services entail on those who conduct them.
- 5. Show the relation of Christian Baptism to "the Covenant of Circumcision" which God gave to Abraham; and defend therefrom the theory and practice of the baptism of Christian infants.
- 6. What Form or Order of Service would you use in administering Baptism to an adult.
- 7. State the qualifications, as to Christian belief, feeling and conduct which may be legitimately required in candidates for the Lord's Supper.
- 8. Describe the nature and method of the instructions which you would impart to candidates for the Communion; state what Services you would institute in your congregation preparatory to the Communion, with a view to the instruction of the communicants generally; give also, in brief, the order of service which you would follow in the administration of the Lord's Supper.
- 9. By what general principles should a minister govern himself in his pastoral intercourse with the people of his parish, especially during the earlier period of his residence among them?
- 10. Describe the constitution and functions of the Kirk-Session, and explain the relation which this Court bears to the Presbytery of the bounds.

# SESSION 1877-78.

# EXAMINATIONS IN MEDICINE.

# MATERIA MEDICA.

Examine;s—Drs. LAVELL AND FOWLER.

- 1. What circumstances modify the local actions of medicines?
- 2. What circumstances modify the absorption of medicines?
- 3. Give the doses of the following medicines:—Compound Tincture of Iodine, Iodide of Potassium, Tincture of Aconite Root, Liquor Opii Sedativus, Liquor Potassæ, Arsenious Acid, Salycylic Acid, Salycylate of Soda, Carbonate of Ammonia, Aromatic Spirit of Ammonia, Powdered Jalap—simple and compound, Fluid Extract of Ergot, Santonine for a child of two years, Croton Oil, Bitter Almond Oil, Diluted Hydrocyanic Acid.
- 4. In the case of a child of twelve months old suffering from Diarrhæa, write a prescription for a mixture containing Laudanum, Submitrate of Bismuth, Pepsin, Syrup of Ginger and Cinnamon Water. Give directions for using.
- 5. How do Bromide of Potassium, Acouite, Veratrum Viride, Hydrocyanic Acid, Tartar Emetic and Digitalis differ in their physiological effects?
- 6. How are the following preparations of iron made, and what are their chief physiological actions and therapeutical uses:—Sulphate of Iron, Saccharine Carbonate of Iron, Hydrated Sesquioxide of Iron, Citrate of Iron, Tincture of Sesquichloride of Iron?
- 7. Under what circumstances is Narcotism most apt to be produced by medicinal agents? What steps would you take to obviate the dangerous effects of Narcotism so produced?
- 8. Give the physiological effects, including the character of

the stools produced by the following Cathartics:—Sulphur, Senna, Castor Oil, Croton Oil, Calomel, Elaterium, Gamboge, Jalap, Scammony, Aloes?

9. How is Citrin Ointment made?

#### INSTITUTES OF MEDICINE.

Examiners -- DRS. YATES AND OLIVER.

- 1. Describe the Gastric Juice, by what it is secreted, its chemical properties, the kind of food it acts upon, and the circumstances that increase and decrease its secretion and its solvent action; also give the chemical character of the Pancreatic Juice, the kind of food it acts upon, and how it so acts.
- 2. Describe the movements of the Chest in Expiration and and Inspiration, mentioning the difference between the breathing of males and females, and give (shortly) the changes that take place in the Air and Blood respectively in Respiration.
- 3. Describe the formation of the Voice, and by what articulation and Speech is accomplished.
- 4. Enumerate the chief excrementitious substances normally separated by the Kidneys, and how you would account for the presence of Albumen and Sugar when found in the Urine.
- 5. Give the composition of the Seminal Fluid, and describe the formation of the Spermatozoa in the Testicles.
- 6. Describe the mechanism of Taste and of Audition.
- 7. Give the functions of the Medulla Oblongata and describe the crossed action of the Spinal Cord.
- 8. Give shortly the origin, distribution and functions of the fifth pair of Cranial Nerves.
- 9. What effect on the action of the Heart has Galvanization and Section of the Sympathetic Nerve.

# ANATOMY.

Examiners—Drs. Sullivan and Dupuis.

(Answers to be as brief and pertinent as possible.)

- t. Describle the Orbits, and name the bones entering into their formation.
- 2. Give the boundaries of the Posterior Mediastinum and the parts found in it.
- 3. Fully describe the Superior Carotid Triangle.
- 4. Describe the Knee Joint.
- 5. Give the Origin and Insertion, the Action and Nervous Supply of each of the following Muscles; Gluteus Maximus, Sartorius, Levator Ani, Peroneus Longus, Biceps Humeri, and Pterygoideus Exteruus.
- 6. Describe the situation of the Axillary Artery and its course in the various positions of the Arm and name its Branches.
- 7. Tell the origin, course and distribution of the Pneumogastric Nerve.

# THEORETICAL CHEMISTRY.

Examiners—Dr. Fenwick and Prof. Dupuis.

- Show in any way that elementary substances probably exist in molecules of two atoms each, and give any known exceptions.
- 2. Point out the principal peculiarities of the solution of (a) solids, (b) gases in water.
- 3. Explain carefully the effect upon moist air of (a) reducing the pressure without changing the temperature, (b) of reducing the temperature without altering the pressure.
- 4. The sun's rays consist of three kinds, viz.:—heat, light and actinic rays. Is this strictly correct? Why?
- 5. Explain fully the results of M. Bert's experiments upon condensed and rarefied air.
- 6. State and formulate the result, when:
  - (a) Copper is put into strong Nitric Acid.

- (b) Hydrochloric Acid is added to Potassic Chlorate.
- (c) Sulphuric Acid is boiled with Charcoal.
- (d) Chlorine is passed into wet lime.
- 7. Give the preparation and prominent properties of:
  - (a) Carbon Disulphide—(b) Fluosilicic Acid—(c) Sodic Thiosulphate—(d) Magnesium—(e) Benzene—(f) Potassic Sulphocyanate.
- 8. Explain the constitution, and write graphically an example of each of the following classes of compounds:—
  - (a) Primary Monatomic Alcohol—(b) Diatomic Monobasic Acid—(c) a simple and a compound Ether—(d) an Amine.
- Give natural and artificial sources of:—

   (a) Benzoic Acid—(b) Potassic Hydroxalate—(c) Clucose—(d) Alizarin.
- 10. The percentage composition of a substance is C=40.000. H=6.67, O=53.33, and its vapor-density is 30. Determine the substance.

## BOTANY.

# Examiner-Prof. Dupuis.

- 1. "The permanent fabric of plants contains C, H, O: that of animals contains N also"—examine this distinction.
- 2. Describe the formation of ducts and explain the nature of their markings.
- 3. Explain why leaves fall.
- 4. What do we mean by saying that the leaf is a typical organ organ, and how do we know it to be so.
- 5. Describe any flower affected by irregularity, showing in what the irregularity consists.
- 6. Describe an embryo and show how it becomes useful as a test of classification.
- 7. Classify and describe the dehiscent fruits.
- 8. Describe any two methods of generation in plants, starting where they occur.

g. Plant herbaccous,—leaves alternate, exstipulate—flowers cruciform, tetradynamous, generally in racemes and bractless—sepals deciduous—petals hypogynous—ovary 2 carpeled with parietal placentae. Define the italicised words, and name the order described.

# PRACTICE OF MEDICINE.

Examiners—Drs. Yates and Oliver.

- 1. Describe the course of an attack of Pneumonia, and the physical signs of the respective stages.
- 2. Give the differential diagnosis of Pneumonia, Pleurisy and Bronchitis.
- 3. Distinguish between Hemorrhage from the lungs, and from the stomach.
- 4. Describe a case of acute Rhematism; then the complications which may arise during its progress. Give the treatment of the simple and the complicated forms.
- 5. Give the causes, the diagnosis and the pathology of Cirrhosis of the Liver.
- 6. Distinguish between the unconsciousness, in a Apoplectic Fit, in deep Alcoholic Coma and in Congestion of the Brain.
- 7. Give the duration of the incubation and the subsequent stages, of Variola, Measles and Scarlet Fever respectively, and describe the eruptions of each.

## OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN.

Examiners-Drs. Fowler and Lavell.

- 1. Give the inclined planes of the Pelvis, and their practical importance.
- 2. Give the sutures and Fontanelles of feetal head, state how formed and distinguished, and their practical value.
- 3. Give the relations of Head to the Pelvis in First position of Vertex, when Rotation commences, give direction of sutures and position of Fontanelles.

- 4. Give differential Diagnosis, between Abortion, Dysmenorrhea, and Menorragia.
- 5. Describe the process of an Ordinary Labour, and the means by which delivery is effected.
- 6. Give the causes of Pelvic deformity, and the operative measures indicated in the variuos degrees of it.
- 7. Give Diagnosis of Shoulder presentation, dorso pubic Right Shoulder and details of management.
- 8. Give the premonitory and other signs of Puerperal Uræmic Convulsions, and the treatment of a case during labour.
- 9. Give the causes, general symptoms and treatment of Puerperal Fever, (sporadic.)
- 10. Give causes and Diagnosis of the following misplacements of Uterus; viz:—Prolapsus, Anteversion, and Retroversion.

#### SURGERY.

## Examiners-DRS. DUPUIS AND SULLIVAN.

- I. Give the chemical, physical and microscopic characters of pus, and the treatment of Acute Abscess?
  - 2. Give the differential diagnosis of Hernia into the Vaginal process from ordinary Inguino Scrotal. What is the importance of recognizing the difference in practice, especially as to treatment?
  - 3. What are the principles of treatment of wounded arteries?
  - 4. Describe Hey's, Choparts, Symes, Tirgoff's operations.
  - 5. Give the diagnosis and treatment of Hydrocele and Varicocele.
  - 6. Name in order of liability the dislocations of the Shoulder joint, and the mode of reducing the most common form.

# MEDICAL JURISPRUDENCE.

Examiner-Dr. Fenwick.

- 1. (1) What is the Constitution of the Coroner's Court? (2) Is it necessarily an open Court? (3) Can a medical witness claim exemption in giving evidence in a Court of Law on the ground of communications being confidential?
- 2. (1) What ree the duties of a medical man if called upon to receive a Dying Declaration, and under what circumstances is such received as legal evidence? (2) What is the law with regard to the use of notes in giving evidence?
- 3. In (1) gunshot wounds, and (2) stabs that have traversed the body or limb, how would you distinguish the aperture of entrance from that of exit?
- 4. Mention some reasons why Pregnancy may be (1) feigned, and (2) concealed.
- 5. Describe the *post-mortem* appearances, internal and external, in a person who has died from drowning.
- 6. How far do Cicatrices furnish evidence of identity, and show how important they were in the clebrated Tichborne case?

# PRACTICAL CHEMISTRY AND TOXICOLOGY.

Examiner-Prof. Dupuis.

- 1. Distinguish generally between the purposes and methods of Qualitative and Quantitative analysis.
- 2. Show how you would prepare Hydrochlone Acid, Sulphuretted Hydrogen, Yellow Sulphide of Ammonium.
- 3. Sulphuretted Hydrogen added to an acid solution producess a yellow precipitate. Proceed to determine the substance.
- 4. Distinguish carefully between Hydrochloric and Hydrocyanic acids in Solution. Give the characteristic tests of the latter.
- 5. A stomach supposed to contain strychnine is given to you. Proceed to examine it.